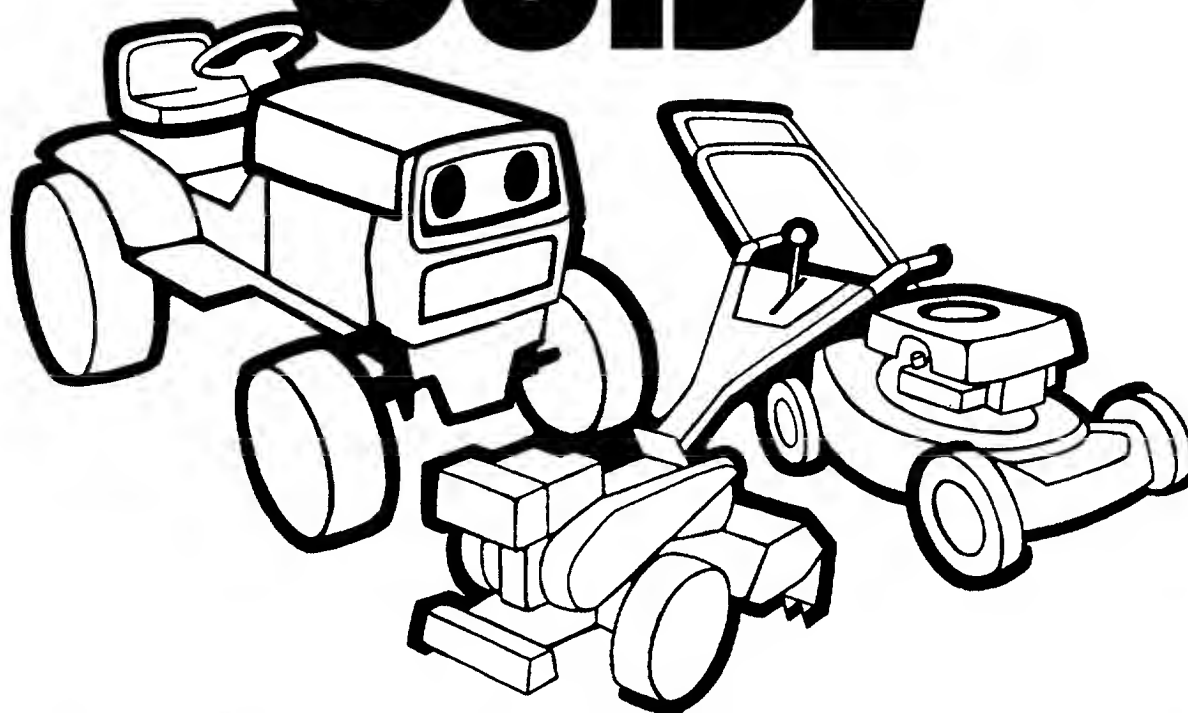


\$1.00

# OWNER'S GUIDE



## 18 H.P. GARDEN TRACTORS

### Model Numbers

147-842-000  
147-843-000  
147-847-000  
147-852-000  
147-853-000  
147-857-000  
147-862-000  
147-863-000  
147-867-000

USE FOR 1988

**IMPORTANT: Read Safety Rules and Instructions Carefully**

Thank you for purchasing an American-built product.

FORM NO. 770-5909B

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*Dear Customer,*

*So often throughout the year we are all in a rush to meet our daily obligations.*

*However, we at MTD Products Inc are taking a quick moment out to say...*

**"Thank you for your business."**

*Sincerely,*  
MTD PRODUCTS INC



**INSTRUCTIONS GIVEN WITH THIS SYMBOL ARE FOR PERSONAL SAFETY. BE SURE TO FOLLOW THEM.**

## LIMITED WARRANTY

For one year from the date of original retail purchase, MTD PRODUCTS INC will either repair or replace, at its option, free of charge, F.O.B. factory or authorized service firm, any part or parts found to be defective in material or workmanship. Transportation charges for the movement of any power equipment unit or attachment are the responsibility of the purchaser. Transportation charges for any parts submitted for replacement under this warranty must be paid by the purchaser unless such return is requested by MTD PRODUCTS INC.

This warranty will not apply to any part which has become inoperative due to misuse, excessive use, accident, neglect, improper maintenance, alterations, or unless the unit has been operated and maintained in accordance with the instructions furnished. This warranty does not apply to the engine, motor, battery, battery charger or component parts thereof. Please refer to the applicable manufacturer's warranty on these items.

This warranty will not apply where the unit has been used commercially.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, please write to the Customer Service Department of MTD.

The return of a complete unit will not be accepted by the factory unless prior written permission has been extended by MTD.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

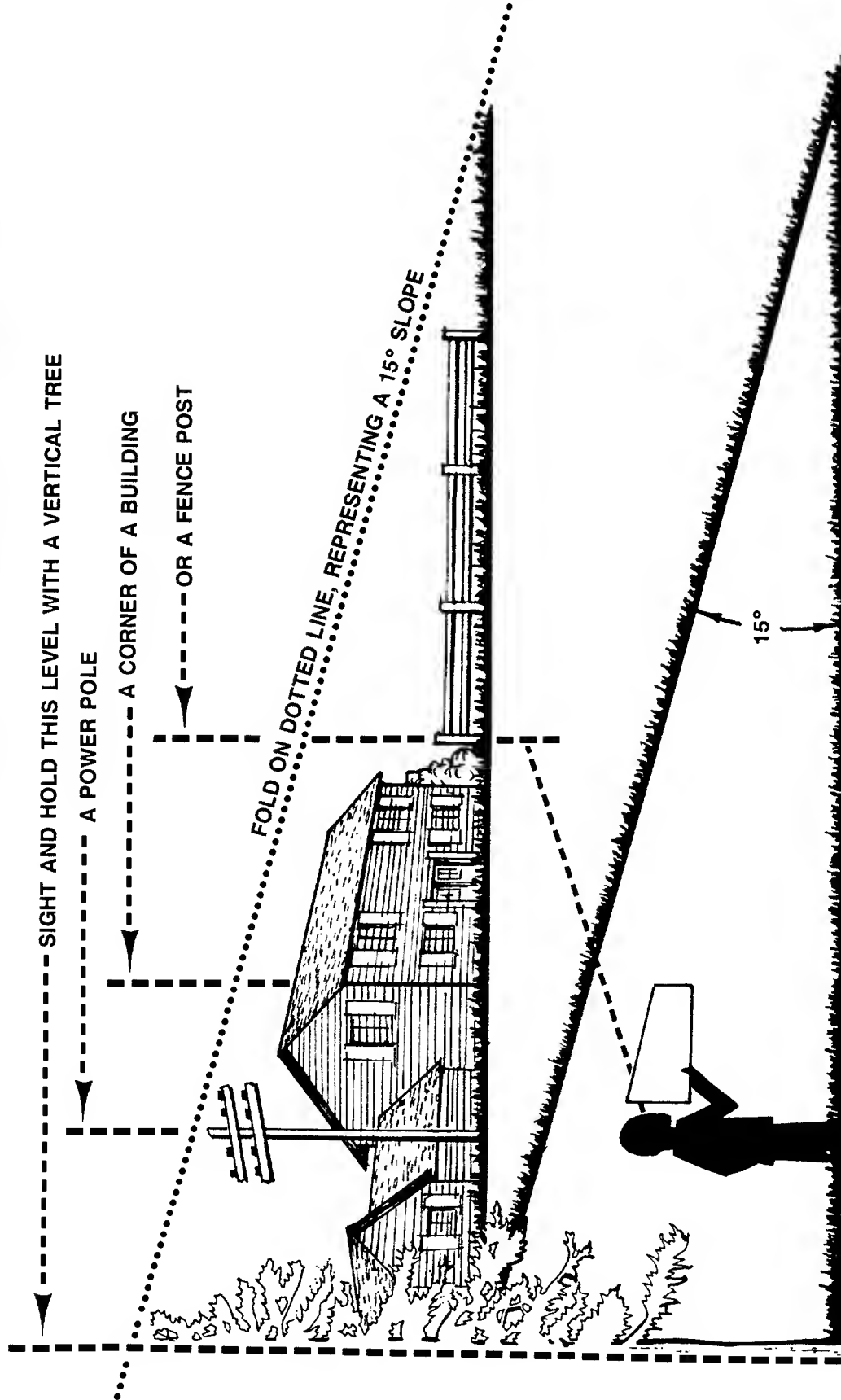
**WARNING:** This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest-covered, brush-covered or grass-covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or state laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator.

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other states may have similar laws. Federal laws apply on federal lands. A spark arrester muffler is available at your nearest engine authorized service center.

USE THIS SHEET AS A GUIDE TO DETERMINE SLOPES WHERE YOU MAY NOT OPERATE SAFELY.

# SLOPE GAUGE

(Keep this sheet in a safe place for future reference.)



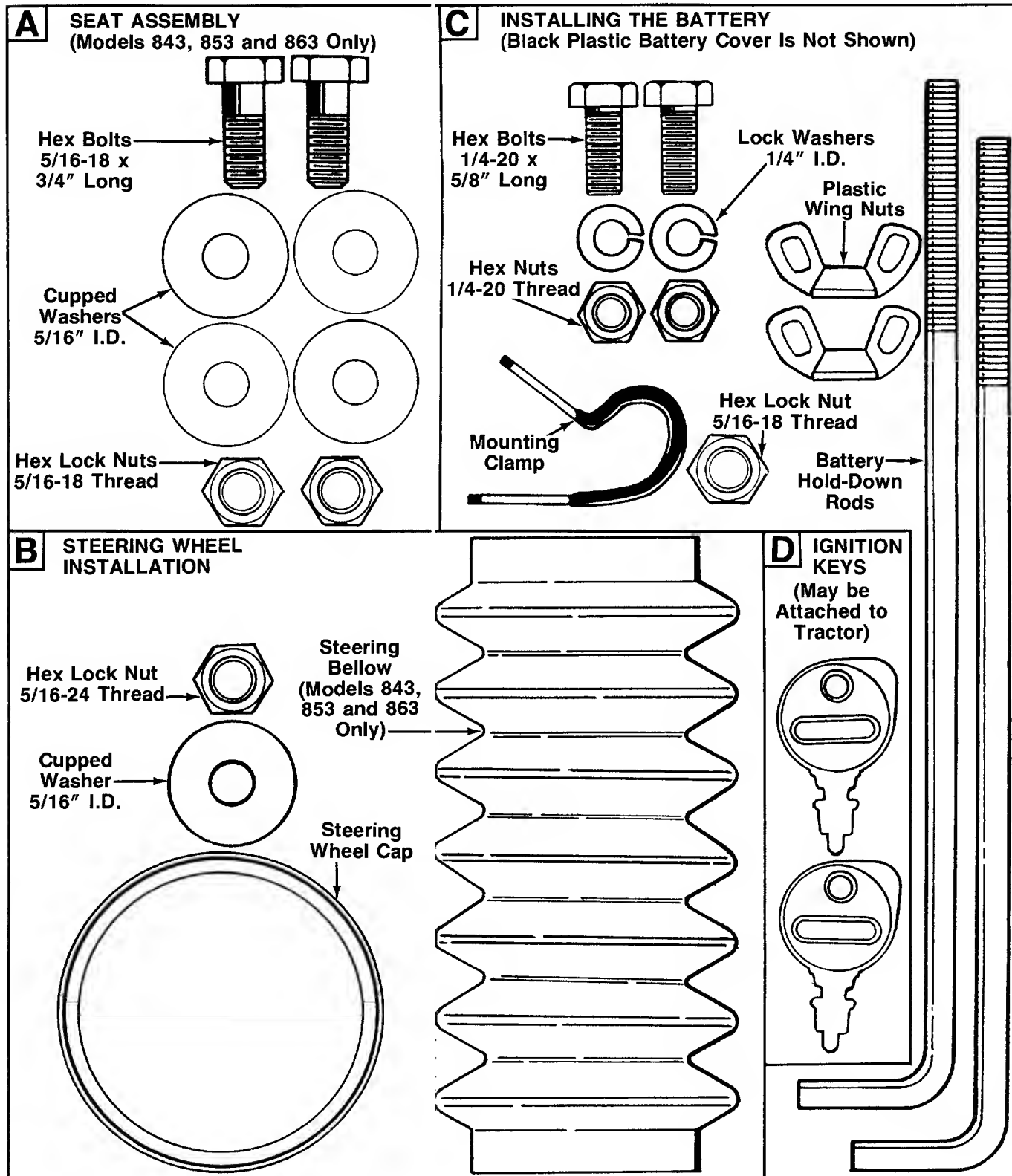
Do not mow on inclines with a slope in excess of 15 degrees (a rise of approximately 2½ feet every 10 feet). A riding mower could overturn and cause serious injury. If operating a walk-behind mower on such a slope, it is extremely difficult to maintain your footing and you could slip, resulting in serious injury.

Operate RIDING mowers up and down slopes, never across the face of slopes.  
Operate WALK-BEHIND mowers across the face of slopes, never up and down slopes.

# CONTENTS OF HARDWARE PACK

Remove this sheet from your owner's manual and lay the hardware on the illustration for identification purposes. Refer to the separate deck manual for any information concerning the deck. After assembly, keep the Slope Gauge which is on the reverse side of this sheet for future use.


(Hardware pack may contain extra items which are not used on your unit.)



# IMPORTANT

## RULES FOR SAFE OPERATION



THIS SYMBOL POINTS OUT IMPORTANT SAFETY INSTRUCTIONS WHICH, IF NOT FOLLOWED, COULD ENDANGER THE PERSONAL SAFETY AND/OR PROPERTY OF YOURSELF AND OTHERS. READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL BEFORE ATTEMPTING TO OPERATE YOUR UNIT. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY. WHEN YOU SEE THIS SYMBOL—  **HEED ITS WARNING.**



### DANGER

Your unit was built to be operated according to the rules for safe operation in this manual. As with any type of power equipment, carelessness or error on the part of the operator can result in serious injury. If you violate any of these rules, you may cause serious injury to yourself or others.

1. READ THIS OWNER'S MANUAL carefully in its entirety before attempting to assemble or operate this unit. Keep this manual in a safe place for future and regular reference and for ordering replacement parts.
2. This unit is a precision piece of power equipment, not a plaything. Therefore exercise extreme caution at all times.
3. Know the controls and how to stop the machine quickly.
4. Do not allow children to operate vehicle. Do not allow adults to operate it without proper instruction. Only persons well acquainted with these rules of safe operation should be allowed to use your mower.
5. Wear sturdy, rough-soled work shoes and close-fitting slacks and shirts to avoid entanglement in the moving parts. Never operate a unit in bare feet, sandals, or sneakers.
6. To prevent injury, do not carry passengers or give rides. Keep children, pets and bystanders out of the area while mowing. Only the operator should ride on the unit and only ride in the seat.
7. Check overhead clearance carefully before driving under power lines, guy wires, bridges or low hanging tree branches, before entering or leaving buildings, or in any other situation where the operator may be struck or pulled from the unit, which could result in serious injury.
8. To maintain control of the unit and reduce the possibility of upset or collision, operate the tractor smoothly. Avoid erratic operation and excessive speed.
9. Keep the area of operation clear of all persons, particularly small children and pets. Stop engine when they are in the vicinity of your mower. Although the area of operation should be completely cleared of foreign objects, a small object may have been overlooked and could be accidentally thrown by the mower in any direction and cause injury to you or a bystander.
10. Stop the blade(s) when crossing gravel drives, walks or roads.
11. Disengage all attachment clutches and shift into neutral before attempting to start engine.
12. Disengage power to attachment(s) and stop engine before leaving operating position.
13. Do not put hands or feet near or under rotating parts. Keep clear of the discharge opening at all times as the rotating blade(s) can cause injury.
14. Disengage power to attachment(s) and stop engine before making any repairs or adjustments. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
15. Before attempting to unclog the mower or discharge chute, stop the engine. The mower blade(s) may continue to rotate for a few seconds after the engine is shut off. Therefore, be sure the blade(s) have stopped completely. Disconnect the spark plug wire and keep the wire away from the plug to prevent accidental starting.
16. Disengage power to attachment(s) when transporting or not in use.
17. Take all possible precautions when leaving vehicle unattended such as disengaging power take-off, lowering attachments, shifting into neutral, setting parking brake, stopping engine and removing key.
18. For your safety, use the slope gauge included as part of this manual to measure slopes before operating this unit on a sloped or hilly area. If the slope is greater than 15° as shown on the slope gauge, do not operate this unit on that area or serious injury could result.
19. Do not stop or start suddenly when going uphill or downhill. Mow up and down face of steep slopes; never across the face. Use extreme caution if it is necessary to drive the tractor up an incline or back the tractor down an incline because the front of the tractor could lift and rapidly flip over backward which could cause serious injury.
20. Reduce speed on slopes and in sharp turns to prevent tipping or loss of control. Always keep the tractor in gear when going down steep hills to take advantage of engine braking action.
21. Stay alert for holes in terrain and other hidden hazards which may cause the unit to tip over.
22. Use care when pulling loads or using heavy equipment.
  - A. Use only approved drawbar hitch points.
  - B. Limit loads to those you can safely control.
  - C. Do not turn sharply. Use care when backing.
  - D. Use counterweight(s) or wheel weights when suggested in owner's manual.
23. Watch out for traffic when crossing or near roadways.
24. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near vehicle while in operation.
25. Handle gasoline with care. It is highly flammable.
  - A. Use approved gasoline container.
  - B. Never remove cap or add gasoline to a running or hot engine or fill fuel tank indoors. Wipe up spilled gasoline.
  - C. Open doors if engine is run in garage. Exhaust fumes are dangerous. Do not run engine indoors.

## Rules for Safe Operation (continued)

26. Keep the vehicle and attachments in good operating condition, and keep safety devices in place. Use guards as instructed in operator's manual.
27. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
28. Never store the machine with fuel in the fuel tank inside a building where ignition sources are present, such as hot water and space heaters, clothes dryers, and the like. Allow the engine to cool before storing in any enclosure.
29. To reduce fire hazard, keep engine free of grass, leaves or excessive grease.
30. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object. The damage should be repaired before restarting and operating the equipment.
31. Do not change the engine governor settings or overspeed the engine.
32. When using the vehicle with mower, proceed as follows:
  - (1) Mow only in daylight or in good artificial light.
  - (2) Never make a cutting height adjustment while engine is running if operator must dismount to do so.
  - (3) Shut the engine off and wait until the blade comes to a complete stop before removing the grass catcher.
  - (4) Check blade mounting bolts for proper tightness at frequent intervals.
33. Check grass catcher bags frequently for wear or deterioration. For safety protection, replace only with new bag meeting original equipment specifications.
34. Look behind to make sure the area is clear before placing the transmission in reverse and continue looking behind while backing up. Disengage blades before shifting into reverse and backing up.
35. This unit should not be driven up a ramp onto a trailer or truck under power, because the unit could tip over, causing serious personal injury. The unit must be pushed manually to load properly.

**➡ IMPORTANT:** This unit is shipped **WITHOUT GASOLINE or OIL**; however, a small amount of oil may be present from the factory. Do not overfill. After assembly, service engine with gasoline and oil as instructed in the separate engine manual packed with your unit.

**➡ NOTE:** Reference to right or left hand side of the unit is observed from the driver's seat, facing forward.

## ASSEMBLY

This owner's manual covers various models of garden tractors. The units illustrated may vary slightly from your unit. Follow the instructions which pertain to your unit.

1. Remove the carton from the tractor as follows. Cut and remove the bands around the carton. Open the top flaps and remove all carton inserts. Lift the carton off the tractor. Roll the tractor off the skid. Make certain all parts and literature have been removed from the carton before the carton is discarded.
2. Remove page four from this manual and lay the contents of the hardware pack on the illustration for identification.

### SEAT ASSEMBLY (Hardware A)

1. **Models 842, 847, 852, 857, 862 and 867:**

The seat can be adjusted to four positions. With the seat tipped forward, hook the front of the seat spring into the slots on the tractor frame. Allow the seat to pivot backwards until it rests on the rear of the springs. See figure 1A.

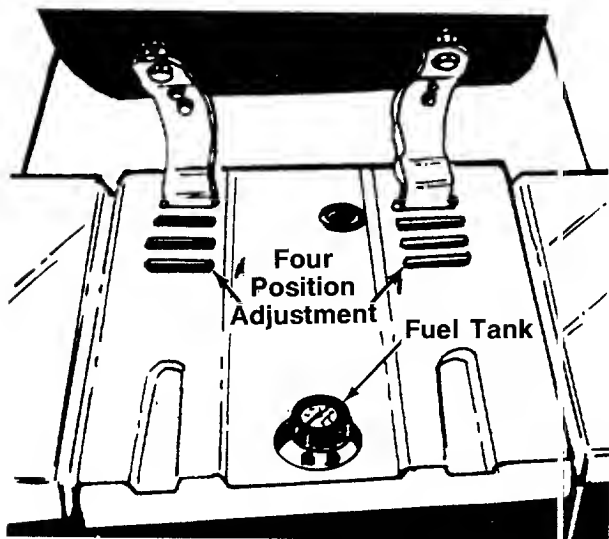


FIGURE 1A.—Models 842, 847, 852, 857, 862 and 867

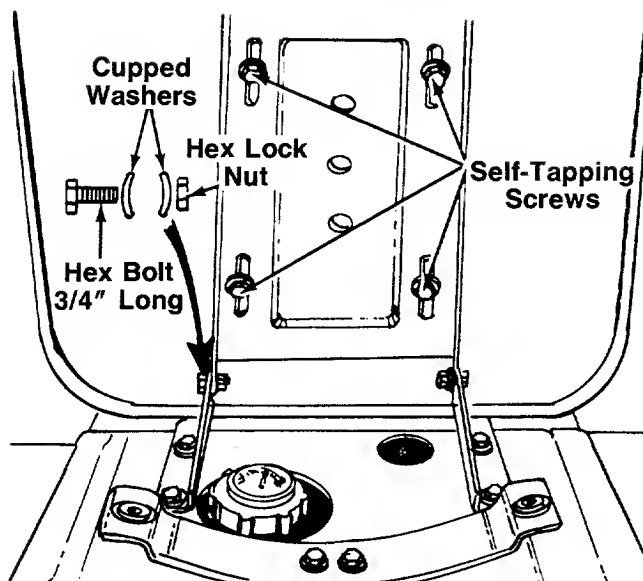


FIGURE 1B.—Models 843, 853 and 863

**Models 843, 853 and 863:**

Place the seat in position against the seat brackets. Secure each side of seat with hex bolt (3/4" long), two cupped washers (on the inside and outside) and hex lock nut. Crown side of washers should be against the head of the bolt and the nut. See figure 1B.

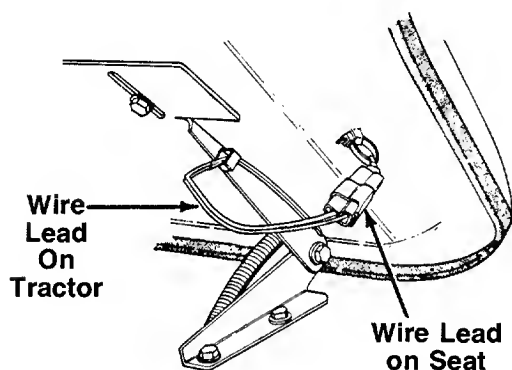


FIGURE 2.—Models 843, 853 and 863 Shown

2. Plug the wire lead which is in the wire harness beneath the seat into the plug on the wire lead extending from the right hand side of the seat. On models 843, 853 and 863, make certain to route the wire in front of the right hand seat bracket so the wire is not pinched when raising and lowering the seat. See figure 2.

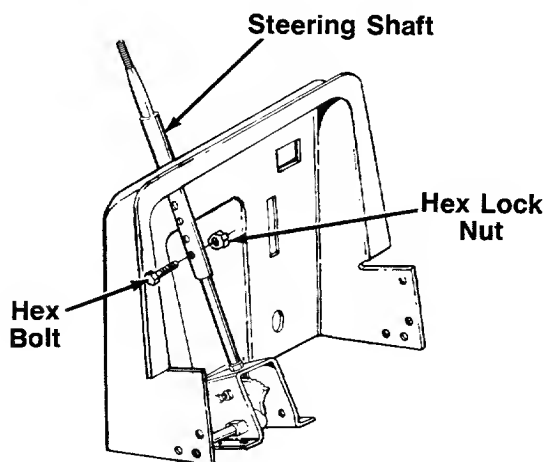


FIGURE 3.—Models 843, 853 and 863

**STEERING WHEEL INSTALLATION (Hardware B)**

**1. Models 843, 853 and 863 only:**

There are four height positions for the steering wheel. For shipping purposes, the steering shaft is assembled in the lowest position. Lift the hood of the tractor. Remove the hex bolt and hex lock nut on the steering shaft. Raise the shaft to desired position and secure with hex bolt and hex lock nut.

See figure 3.

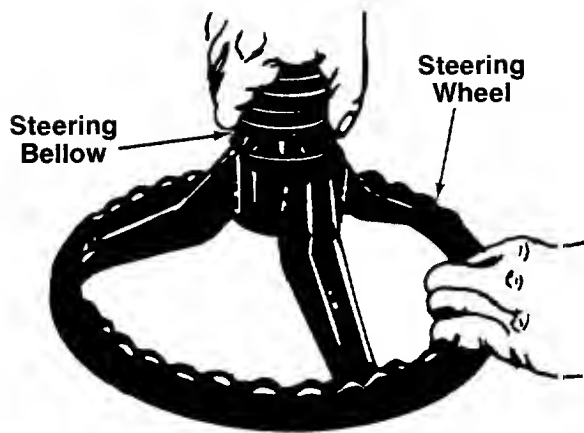


FIGURE 4.—Models 843, 853 and 863

2. **Models 843, 853 and 863 only:**

Attach one end of the plastic steering bellow to the steering wheel as shown in figure 4.

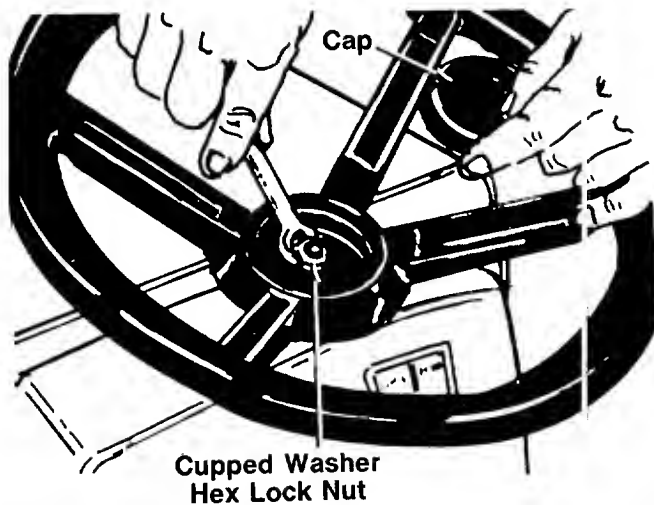


FIGURE 5.

3. Position the front wheels of the tractor so they are pointing straight forward.
4. Place the steering wheel (and steering bellow on models 843, 853 and 863) over the steering shaft extending through the dash, positioning steering wheel as desired.
5. Place the washer with the cupped side down over the steering column. Secure with 5/16" hex lock nut. See figure 5.
6. Place the steering wheel cap over the center of the steering wheel and seat it with your hand.

## BATTERY INFORMATION



- A. Battery acid must be handled with great care as contact with it can burn and blister the skin. It is also advisable to wear protective clothing (goggles, rubber gloves and apron) when working with it.\*
- B. Should battery acid accidentally splatter it to the eyes or onto the face, rinse the affected area immediately with clean cold water. If there is any further discomfort, seek prompt medical attention.
- C. If acid spills on clothing, first dilute it with clean water, then neutralize with a solution of ammonia/water or baking soda/water.
- D. Since battery acid is corrosive, do not pour it into any sink or drain. Before discarding empty electrolyte containers, rinse them with a neutralizing solution.
- E. NEVER connect or disconnect charger clips to battery while charger is turned on as it can cause sparks.
- F. Keep all lighted materials (cigarettes, matches, lighters) away from the battery as the hydrogen gas generated during charging can be combustible.
- G. As a further precaution, only charge the battery in a well-ventilated area.

**\*Always shield eyes, protect skin and clothing when working near batteries.**





Battery contains sulfuric acid. Antidote: EXTERNAL—Flush with water. INTERNAL—Drink large quantities of water or milk. Follow with milk of magnesia, beaten egg or vegetable oil. Seek prompt medical attention. EYES: Flush with cool water for at least 15 minutes, then seek immediate medical attention.

Since batteries produce explosive gases, keep all lighted materials (cigarettes, lighters, matches, etc.) away. Be sure to charge battery only in well-ventilated areas.

KEEP BATTERIES OUT OF THE REACH OF CHILDREN.

### ACTIVATING THE BATTERY

1. Place the battery to be filled on a workbench. Never activate a battery in the unit.
2. Slip one end of battery drain tube on the battery manifold.
3. Remove the fill caps from all cells.

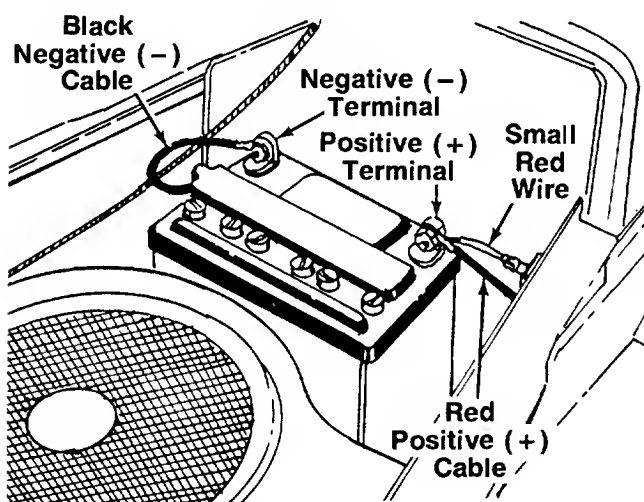


FIGURE 6.

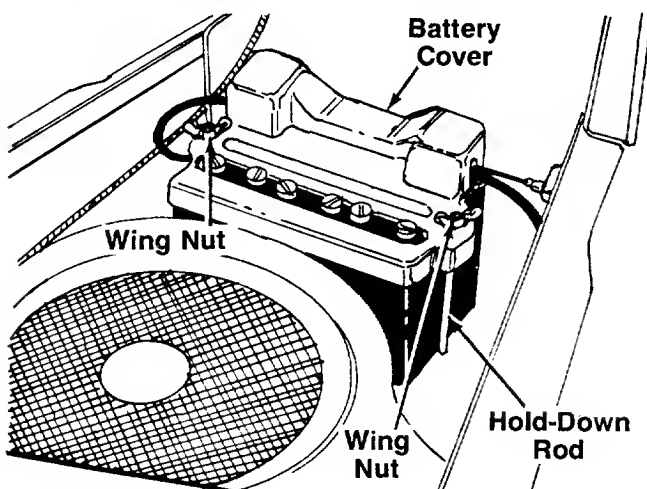


FIGURE 7.

4. Fill each cell carefully using 1.265 specific gravity electrolyte. Fill each cell to the top of the separators. Do not overfill.
5. Let the battery sit for 20 minutes to allow the chemical reaction to take place.
6. Charge the battery at a MAXIMUM RATE OF 5 AMPS. until the specific gravity reads 1.265. Use a hydrometer to check the specific gravity.

### NOTE

An excessive rate of charge will damage the battery.

7. Check the level of electrolyte. Adjust level to bottom of split ring if necessary with electrolyte.
8. Replace fill caps.

### NOTE

After battery has been in service, add only distilled water, or pure drinking water. DO NOT ADD ACID.

### NOTE

This engine is equipped with an alternator. The current for the battery charger alternator is unregulated. During normal operation, it is only necessary to charge the battery:

1. When it is activated for the first time.
2. Before winter storage.
3. Before using the garden tractor after winter storage.

### INSTALLING THE BATTERY (Hardware C)

### NOTE

The positive battery terminal is marked Pos. (+). The negative battery terminal is marked Neg. (-).

1. Place the battery on the battery plate with the terminals towards the rear of the tractor.
2. Attach the positive cable (heavy red wire) and the small red wire (from the circuit breaker) to the positive battery terminal (+) with hex bolt 5/8" long, 1/4" lock washer and hex nut. See figure 6.
3. Attach the negative cable (heavy black wire) to the negative battery terminal (-) with the other hex bolt 5/8" long, 1/4" lock washer and hex nut.
4. Hook one hold-down rod into the hole in battery plate beside the battery. See figure 7. Place the black plastic battery cover in position over the hold-down rod. Secure with wing nut. Attach other hold-down rod to the other side of battery cover in the same manner.

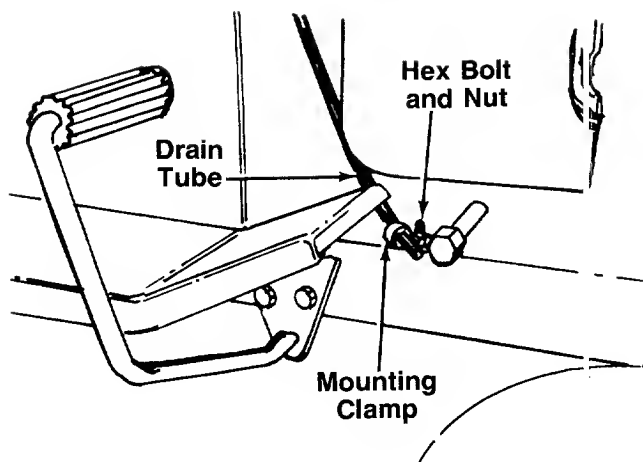


FIGURE 8.

5. Route the battery drain tube down beside the oil drain pipe on the right side of the tractor.

Slip the end of the drain tube into the mounting clamp provided in hardware pack. Secure the mounting clamp to the tractor by placing the clamp over the hex bolt and nut which hold the engine pulley belt guard to the frame. Secure in place with hex lock nut. See figure 8.

#### NOTE

The vented battery allows any gases or liquid from the battery to be drained onto the ground.

### TIRE PRESSURE

For shipping purposes, the tires on your unit may be over-inflated. Tire pressure should be reduced before unit is put into operation. Recommended operating tire pressure should be 10 p.s.i.

Check sidewall of tire for manufacturer's maximum tire pressure. If this information does not appear on your tire, maximum tire pressure under any circumstances is 30 p.s.i. Equal tire pressure should be maintained on all tires.

## CONTROLS

### IGNITION SWITCH

The ignition switch is located on the dashboard. Turn the key to the START position to start the engine. When the engine is running, leave the key in the ON position. To stop the engine, turn the key to the OFF position. See figure 9.



#### WARNING

Remove the key from the tractor when the tractor is not in use to prevent accidental starting.

### THROTTLE CONTROL

The throttle control is located on the left side of the dashboard and is used to regulate the engine speed. See figure 9. The engine should be operated from  $\frac{3}{4}$  to full throttle (FAST) when operating any equipment that uses the tractor engine as a source of power such as the mowing deck, snow thrower or rotary tiller.

### CHOKE CONTROL

The choke control is located on the right side of the dashboard and is operated manually. Details for the choke operation are covered in the separate engine manual packed with your unit. See figure 9.

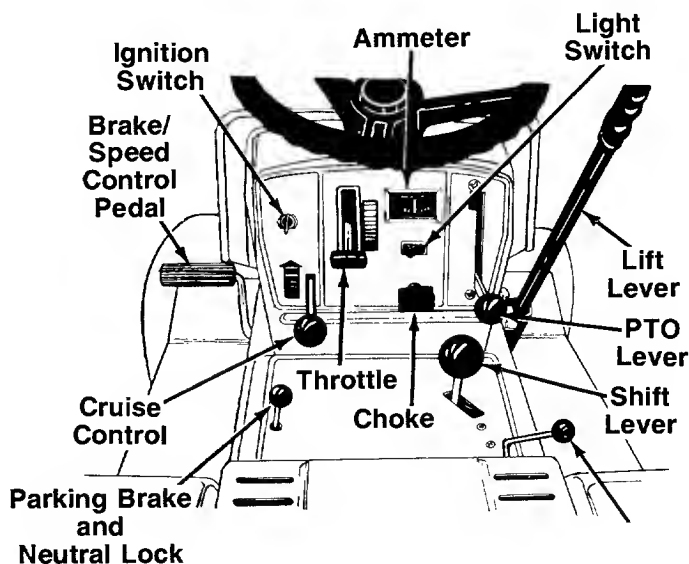


FIGURE 9.—Models 842, 847, 852, 857, 862 and 867 Shown

### LIGHT SWITCH

The head lamps are operated by pushing the light switch located on the dashboard. The head lamps will only operate when the engine is running. See figure 9.

### AMMETER

The ammeter registers the rate of battery charge or discharge. The ammeter will register on the discharging side with starting the engine. It should register on the opposite side (charging) when the engine is running in the fast position until the battery is completely charged. With a fully charged battery or with the engine idling, the ammeter will not show a charge. See figure 9.

### GASOLINE TANK

The gasoline tank is located under the tractor seat. Tip the seat forward to fill the tank. Refer to figure 1. Be careful not to pinch the wire lead to the seat switch when raising and lowering the seat.

### BRAKE/SPEED CONTROL PEDAL

The brake/speed control pedal is located on the left side of the tractor. See figure 9. Depress the brake/speed control pedal to put the drive control into neutral. The further the brake/speed control pedal is released, the faster the tractor will travel.

#### ➡ NOTE

The brake/speed control pedal must be depressed all the way to start the engine.

### CRUISE CONTROL LEVER

The cruise control lever is located on the left side of the dash. See figure 9. This lever is used to regulate the ground speed of the tractor. When the brake/speed control pedal is released, it will release only to the speed selected by the cruise control lever.

### PARKING BRAKE AND NEUTRAL LOCK

The parking brake and neutral lock is located on the left side of the transmission panel. See figure 9. To set the parking brake and neutral lock, depress the brake/speed control pedal, pull parking brake and neutral lock knob up and release the brake/speed control pedal.

### SHIFT LEVER

The shift lever is located on the right side of the transmission panel. This lever is used to select either forward or reverse. See figure 8. The brake/speed control pedal must be depressed so that the unit is in neutral before shifting.

#### ➡ NOTE

Never force the shift lever.

### LIFT LEVER

The five position lift lever is used to change the operating position of the attachments. To operate, pull the lever towards you. To release, move the lever to the right and then forward. See figure 9.

### POWER TAKE-OFF (PTO) LEVER

The PTO lever is located on the right side of the dashboard. To engage the PTO, lift the lever slowly and lock it into the notch. See figure 9.

#### ➡ NOTE

The PTO lever **must** be in the disengaged position (down) when starting the engine when shifting into reverse and if the operator leaves the seat.

## OPERATION

### CAUTION

- READ OPERATOR'S MANUAL(S) • NEVER CARRY CHILDREN
- KNOW LOCATION AND FUNCTION OF ALL CONTROLS
- KEEP SAFETY DEVICES (GUARDS, SHIELDS AND SWITCHES) IN PLACE AND WORKING
- REMOVE OBJECTS THAT COULD BE THROWN BY BLADE(S)
- DO NOT OPERATE THE UNIT WHEN CHILDREN AND OTHERS ARE AROUND
- ALWAYS LOOK BEHIND THE UNIT BEFORE BACKING UP
- DO NOT OPERATE THE UNIT WHERE IT COULD SLIP OR TIP
- IF THE UNIT STOPS GOING UPHILL, STOP BLADE(S) AND BACK SLOWLY DOWNHILL
- BE SURE BLADE(S) AND ENGINE ARE STOPPED BEFORE PLACING HANDS OR FEET NEAR BLADE(S)
- BEFORE LEAVING OPERATOR'S POSITION, SHUT ENGINE OFF AND REMOVE KEY

### GAS AND OIL FILL-UP

Service the engine with gasoline and oil as instructed in the separate engine manual packed with your tractor. Read instructions carefully.

#### ➡ NOTE

Your tractor is shipped without oil; however, a small amount of oil may be present from the factory. Do not overfill.



Never fill fuel tank indoors, with engine running or while engine is hot.

## OPERATING THE TRACTOR

### NOTE

This unit is equipped with a **safety interlock system** for your protection. The purpose of the safety interlock system is to prevent the engine from cranking or starting unless the brake/speed control pedal is depressed and the PTO lever is in the disengaged position. In addition, the PTO lever must be in the disengaged position when the unit is put into reverse or the engine will shut off. If the operator leaves the seat with the PTO lever engaged, the engine will shut off.



Do not operate the tractor if the interlock system is malfunctioning because it is a safety device, designed for protection.

1. Place the PTO lever in the disengaged (down) position.
2. Pull out the choke control. A warm engine requires less choking.
3. Set the throttle control in the FAST position.
4. Make certain the parking brake and neutral lock is set.
5. Turn the ignition key to the START position. After the engine starts, release the key.

### NOTE

For cold weather starts, depress and hold the cold weather start knob while starting the engine.

6. Slowly push in the choke as the engine warms up.
7. Depress the brake/speed control pedal all the way to release the parking brake and neutral lock.
8. With the brake/speed control panel depressed, move the shift lever into forward or reverse.
9. Release the brake/speed control pedal until the desired speed is set. Set the cruise control.
10. When stopping, depress the brake/speed control pedal to put the drive control into neutral and apply the brake. Pull parking brake and neutral lock knob up and release the brake/speed control pedal to set the neutral lock.

11. To shut off the engine, turn the ignition key to the left to the OFF position. Remove the key to prevent accidental starting while equipment is unattended.

### IMPORTANT

If you strike a foreign object, stop the engine. Remove wire from spark plug, thoroughly inspect the mower for any damage, and repair the damage before restarting and operating the mower.

### NOTE

If any problems are encountered, refer to the Trouble Shooting Chart on page 20.

## ADJUSTMENTS



Disconnect the spark plug wire and ground against the engine before performing any adjustments, repairs or maintenance.

### SEAT ADJUSTMENT

**Models 842, 847, 852, 857, 862 and 867:** The tractor seat is adjustable to four positions. To change positions, tip the seat all the way forward and lift it out of the slots on each side. Refer to figure 1A.

**Models 843, 853, and 863:** To adjust the position of the seat, loosen the four self-tapping screws on the bottom of the seat. See figure 1B. Slide the seat forward or backward as desired. Retighten the self-tapping screws.

### HYDROSTATIC CONTROL ADJUSTMENT (See figure 10)

To adjust the hydrostatic controls, proceed as follows.

1. Disconnect the control rod from the speed control transfer assembly by removing the hex nut, lock washer and shoulder spacer from the ball joint assembly on the end of the control rod.
2. Loosen the two 1/4" hex nuts on the pintle control plate.
3. Push back on the control rod so that the spacer on the pintle drive plate contacts the stop screw.
4. Adjust the stop screw until the shift lever can move freely in the neutral slot (forward to reverse).

5. Move shift lever to forward position, and move pintle control plate to fast forward (position shown in figure 10). Be certain to hold the pintle control plate in this position as you tighten the hex nuts in steps 6 and 7.
6. Using a  $\frac{3}{4}$ " wrench, turn the center nut on pintle control plate clockwise until it stops.
7. Tighten securely the two  $\frac{1}{4}$ " hex nuts on the pintle control plate.
8. Reassemble the ball joint assembly on the end of the control rod to the speed control transfer assembly.
9. Loosen the two lock nuts on the control rod.
10. Lock out the brake/speed control pedal (all the way forward position).
11. Adjust the control rod so the pintle control assembly firmly contacts the stop screw. Tighten lock nuts on the control rod.
12. Check the brake adjustment as instructed in the following section.

## **BRAKE ADJUSTMENT**

During normal operation of this machine, the brakes are subject to wear and will require periodic examination and adjustment.



### **CAUTION**

Do not adjust the brake while the engine is running. Be sure to block the wheels of the tractor before making the brake adjustment.

To check the brake adjustment, move the cruise control lever to slow position. Block the rear wheels off the ground, and release the brake/speed control pedal. The brake disc must be free. If adjustment is necessary, proceed as follows.

Tighten the hex lock nut shown in figure 11, then back it off until the brake disc is free. Test the brakes and readjust if necessary.

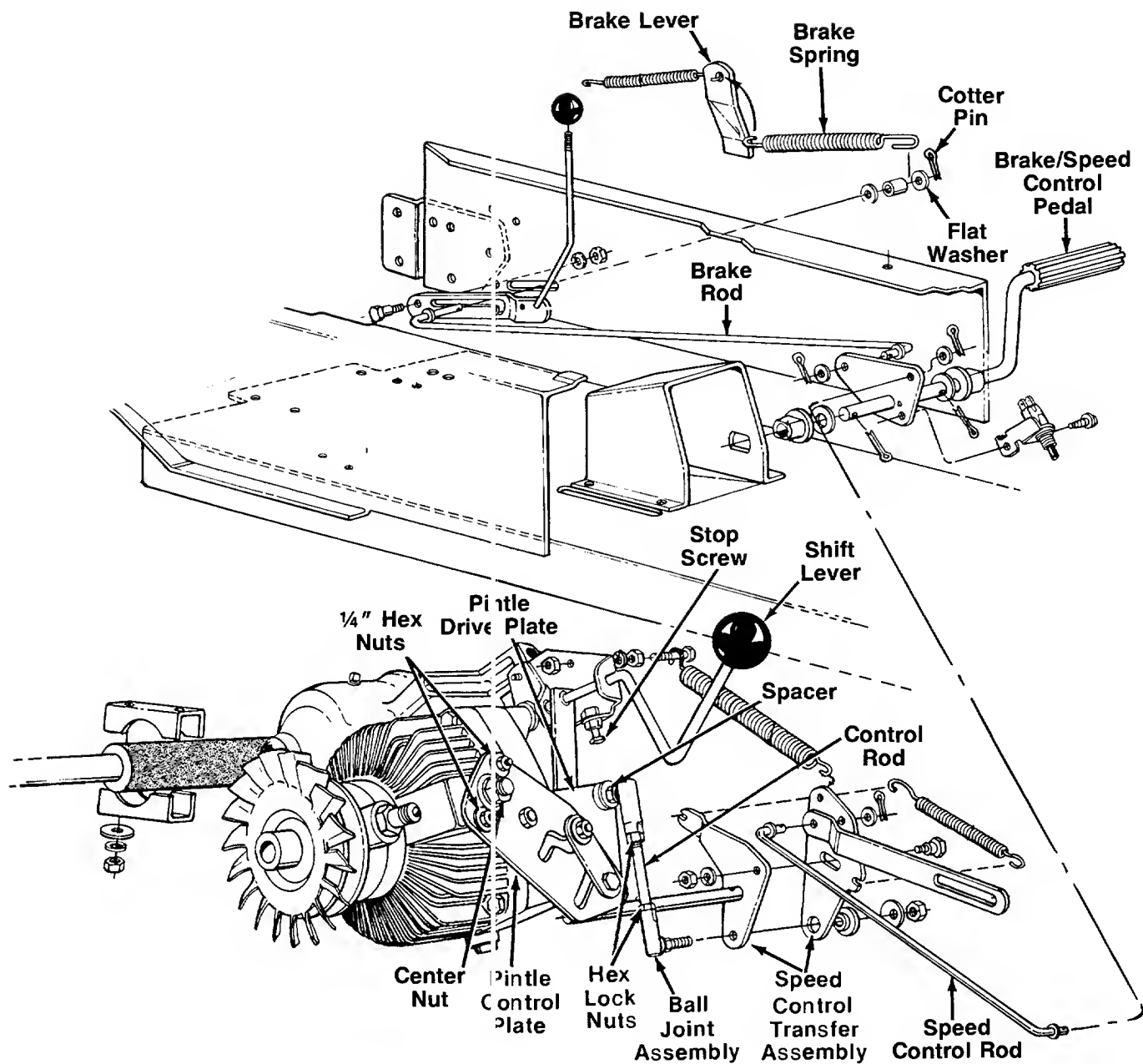


FIGURE 10.

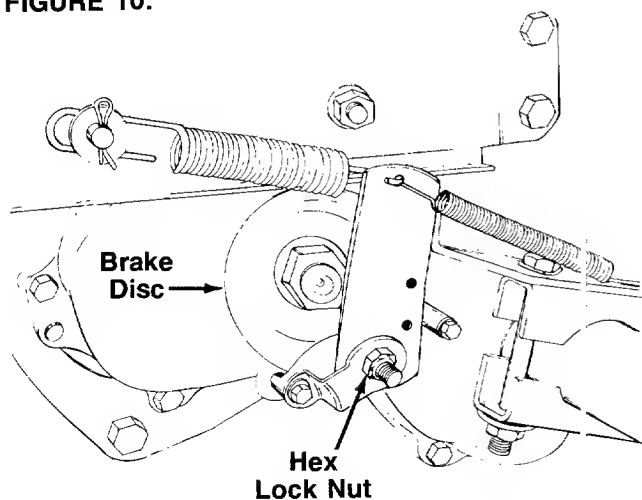


FIGURE 11.

#### NEUTRAL ADJUSTMENT (See figure 10)

If the tractor creeps with the brake/speed control pedal depressed to the neutral position, adjust as follows.

1. Remove the transmission panel by unscrewing the control knobs, removing two truss machine screws and disconnecting the safety switch.
2. Block up the tractor securely so that the rear wheels are off the ground.
3. Release the brake/speed control pedal.
4. The brake spring is located by the left rear wheel. Disconnect the brake spring from the brake rod by removing the cotter pin and flat washer on the end of the rod. Replace flat washer and cotter pin loosely.

5. Lock out the brake/speed control pedal (all the way forward position).
6. Loosen the two 1/4" hex nuts on the pintle control plate.
7. Start the engine.
8. Using a 3/4" wrench, turn the center nut on the pintle control plate until both wheels stop.

### NOTE

If the wheels turn backward, turn the nut clockwise. If the wheels turn forward, turn the nut counterclockwise.

9. Tighten the two 1/4" hex nuts securely.
10. Reassemble the brake spring, and secure with flat washer and cotter pin.
11. Reassemble the transmission cover.

### DECK ADJUSTMENT LINKS

If an uneven cut is obtained, the deck may be adjusted. Adjustable lift link assemblies are located on the left side of the unit. Refer to Ref. Nos. 16, 34, and 54 on page 32.

To adjust the deck, remove the hairpin cotter and washer from the clevis pin. Thread eyebolt up or down the adjustable link lift assembly as necessary. Replace clevis pin, washer and hairpin cotter.

### REAR WHEEL TRACK ADJUSTMENT

The distance between the rear wheels can be changed from wide to narrow by removing the rear wheels one at a time and reversing them on the hub.

With the rear wheels in the narrow position, the outside of the rear wheels is even with the outside of the front wheels.

With the rear wheels in the wide position, the inside of the rear wheels is even with the outside of the front wheels.

### CARBURETOR ADJUSTMENTS



If any adjustments are made to the engine while the engine is running (e.g. carburetor), disengage all clutches and blades. Keep clear of all moving parts. Be careful of heated surfaces and muffler.

Minor carburetor adjustments may be required to compensate for differences in fuel, temperature, altitude and load. Refer to separate engine manual for carburetor adjustment information.

### NOTE

A dirty air cleaner will cause an engine to run rough. Be certain air cleaner is clean and attached to the carburetor before adjusting carburetor. Refer to the separate engine manual.

### STEERING WHEEL ADJUSTMENT (Models 843, 853 and 863 Only)

There are four height positions for the steering wheel. To adjust the height of the steering wheel, remove the hex bolt and hex lock nut on the steering shaft. Place the steering wheel in the position desired and secure with hex bolt and hex lock nut. See reference numbers 56 and 57 on page 30.

## LUBRICATION

### STEERING GEARS

Wipe off the old grease and dirt. After every 25 hours of operation place an automotive multi-purpose grease in the teeth of the segment and pinion gears. See figure 12.

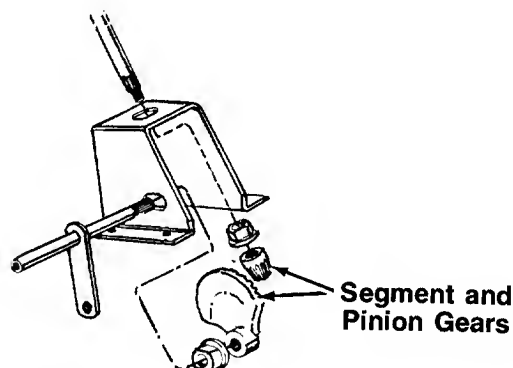


FIGURE 12.

### TRANSAXLE

Check the oil level four times a year. Lubricant should be at the point of overflowing. Use E.P. 90 oil. Drain and refill every two years. Capacity 2 3/4 pints. See figure 13.

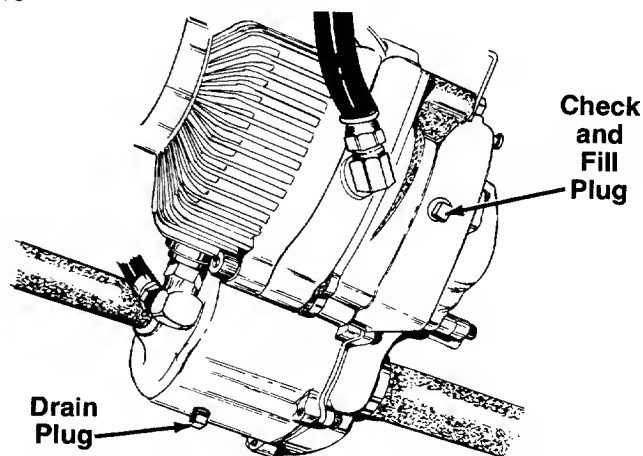


FIGURE 13.

## LINKAGE

Once a season lubricate all the pivot points on the brake and lift linkage with SAE 30 engine oil.

## FRONT WHEELS

The front wheels are provided with grease fittings. Lubricate at least once a season with automotive multi-purpose grease.

## PIVOT POINTS

Lubricate all pivot points with light oil at least once a season.

## BALL JOINTS

The ball joints and drag link ends are permanently lubricated.

# MAINTENANCE



### WARNING

Disconnect the spark plug wire and ground against the engine before performing any adjustments, repairs or maintenance.

*ADD OIL WHEN LOW  
DO NOT CHANGE*

## TROUBLE SHOOTING

Refer to the chart on page 20 for trouble shooting engine problems.

## HYDROSTATIC OIL LEVEL

The hydrostatic oil level should be checked prior to initial use, and after every 8 hours of operation.

To check the hydrostatic oil level, remove the transmission panel by unscrewing the control knobs, removing two truss machine screws and unplugging the safety switch. The oil level must be between the low and high marks on the reservoir tank. See figure 14.

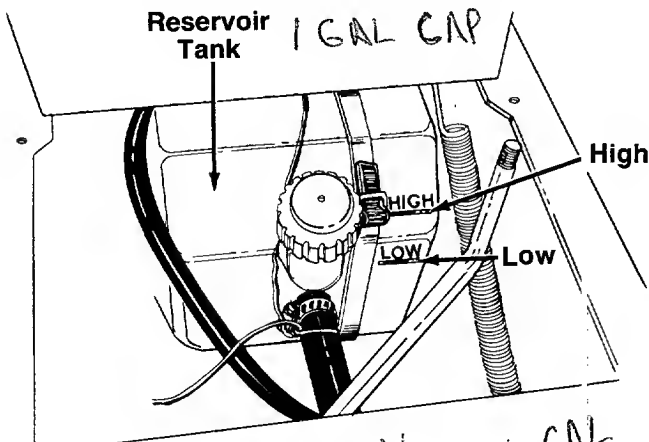


FIGURE 14.

The following fluids are recommended for use in the hydrostatic transmission.

1. Mobil Fluid 300

2. Texaco TL-2209

3. Dexron B (General Motors)

4. M2C-33F and M2B-41A (Ford Motor)

5. Hy-Tran (International Harvester)

6. 10W + Straight Viscosity—SE, CC or CD Rated Engine Oil.

- \*\*7. 20W + Straight Viscosity—SE, CC or CD Rated Engine Oil.

8. 30W + Straight Viscosity—SE, CC or CD Rated Engine Oil.

\*\*Preferred.



### NOTE

Never use a multi-viscosity oil.

Change ~~oil~~ and filter initially after twenty hours of operation; thereafter, change every 100 hours or once a year.

## OIL FILTER

A full flow replaceable oil filter, located in the oil lines under the frame near the right rear wheel, should be replaced initially after twenty hours of operation. Thereafter, replace every 100 hours for commercial or industrial applications and yearly for normal usage. It can be removed by turning it counterclockwise by hand. Use Fram filter number PH-16; order part number 727-0162.

## CRANKCASE OIL

To ensure maximum engine performance, perform the following periodic maintenance:

Check the oil level in the crankcase before each use of the machine and after every two hours of operation. Keep the oil level between ADD and FULL. See figure 15.

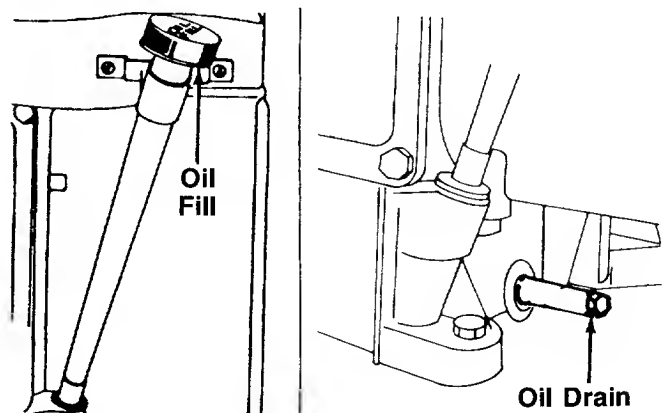


FIGURE 15.

After the first two hours of operating a new engine, drain the oil (see figure 15) from the crankcase while engine is still hot and refill crankcase with new oil; thereafter change the oil after every 25 hours of operation. This



procedure ensures minimum wear of engine parts. To change the oil, proceed as follows:

- Step 1. Remove oil filler plug.
- Step 2. Drain the oil.
- Step 3. Replace oil filler plug.
- Step 4. Refill crankcase with oil. Refer to separate engine manual for quantity and type of oil.

## FUEL FILTER

Your unit is equipped with a replaceable in-line fuel filter. Replace filter whenever contamination or discoloration is noticed. Order replacement filter through your authorized engine service dealer.

## ENGINE

Refer to separate engine manual for all engine maintenance procedures.

## WHEEL ALIGNMENT

The front wheels should toe-in approximately  $\frac{1}{8}$ ". Measure the distances A and B on the front wheels. See figure 16.

### NOTE

Dimension B should be approximately  $\frac{1}{8}$  inch less than dimension A.

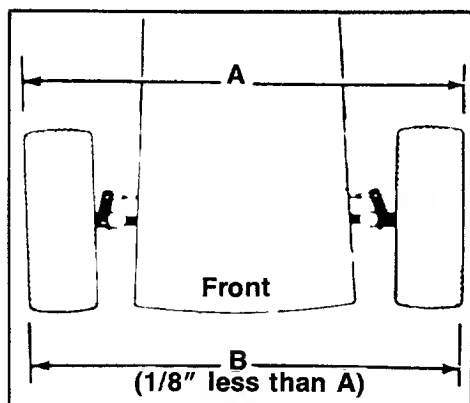


FIGURE 16.

To adjust the toe-in, loosen the hex jam nut, remove the elastic lock nut, lift the tie rod end out of the hole in the steering arm and screw the tie rod end in or out as necessary. See figure 17.

Reassemble the tie rod end after the correct alignment is made.

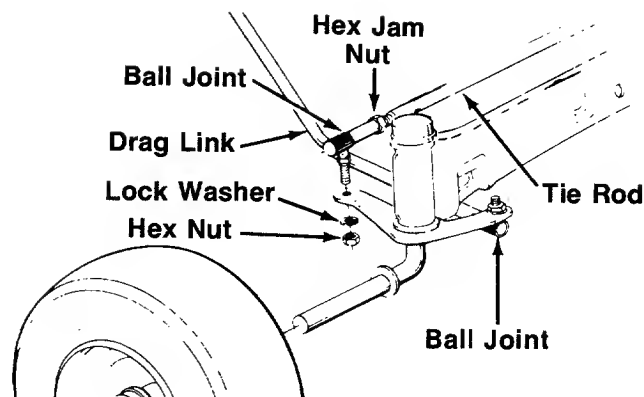


FIGURE 17.

## DRAG LINK

If the drag link or ball joints are changed, the new assembly must be adjusted to the exact same length as the original. If adjusted incorrectly, it will allow the tractor to turn sharper one direction than the other.

To take off the drag link, remove the nuts and lock washers holding the ball joint to the steering gear and left front axle bracket. See figure 17.

## MAINTENANCE OF BATTERY

1. Check electrolyte level periodically (at least every two weeks). Keep the level to the split rings. Use only distilled water or a good quality drinking water. Never add acid or any other chemicals to the battery after initial activation.
2. The battery should be checked with a hydrometer after every 25 hours of operation. If the specific gravity is less than 1.225, the battery should be recharged. Maximum charge rate 5 AMPS.
3. Coat the terminals and exposed wire with a thin coat of grease or petroleum jelly for longer service and protection against corrosion.
4. The battery should be kept clean. Any deposits of acid should be neutralized with soda and water. Be careful not to get this solution in the cells.
5. Avoid tipping the battery. Even a "sealed" battery will leak electrolyte when tipped.

## STORAGE OF THE BATTERY

1. Charge battery using normal methods. NEVER store discharged battery as it will not recover.
2. When storing battery for extended periods, disconnect battery cables. Removing battery from unit is recommended.
3. Store in cold, dry place.
4. Recharge battery whenever the specific gravity is less than 1.225, before returning to service, or every two months, whichever occurs first.

## COMMON CAUSES FOR BATTERY FAILURE

1. Overcharging
2. Undercharging
3. Lack of water
4. Loose hold downs and/or corroded connect ons
5. Excessive loads
6. Battery electrolyte substitutes
7. Freezing of electrolyte

### NOTE

These failures do not constitute warranty.

## BATTERY REMOVAL OR INSTALLATION



### WARNING

When removing the battery, follow this order of disassembly to prevent your wrench from shorting against the frame.

1. Remove the Negative cable.
2. Remove the Positive cable.

To install a battery:

1. Attach the Positive cable.
2. Attach the Negative cable.

## JUMP STARTING

1. Attach the first jumper cable from the Positive terminal of the good battery to the Positive terminal of the dead battery.
2. Attach the second jumper cable from the Negative terminal of the good battery to the FRAME OF THE UNIT WITH THE DEAD BATTERY.



### WARNING

Failure to use this starting procedure could cause sparking, and the gases in either battery could explode.

## INSTALLATION OF TIRE TO RIM



### WARNING

The following procedure must be followed when removing or installing a tire to the rim.

1. Be sure rim is clean and rust free.
2. Lubricate both the tire and rim generously.

3. Never inflate to over 30 p.s.i. to seat beads. Excessive inflation pressure when seating beads may cause tire/rim assembly to burst with force sufficient to cause serious injury.

## BELT REMOVAL AND REPLACEMENT

### Rear Drive Belt

1. If a cutting deck is attached to your tractor, remove it.
2. Roll the bottom edge of belt off the jackshaft pulley. See figure 18.

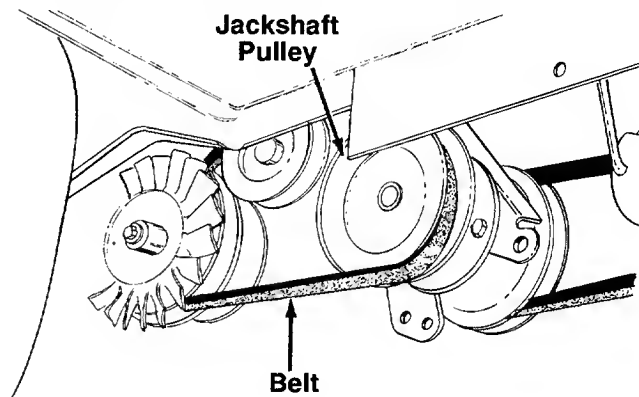


FIGURE 18.

3. Slip the belt off the transaxle pulley.
4. Pull idler pulley down, and remove the belt. See figure 19.

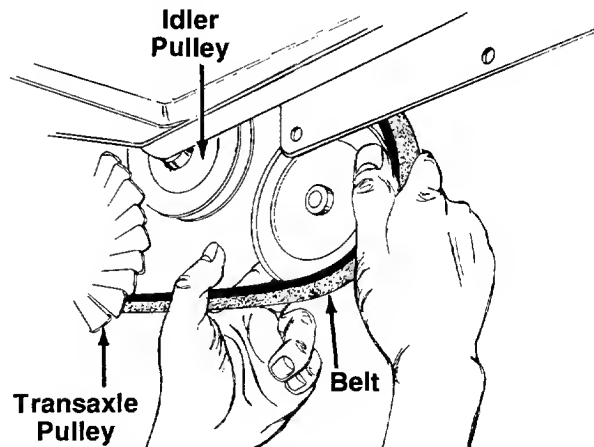
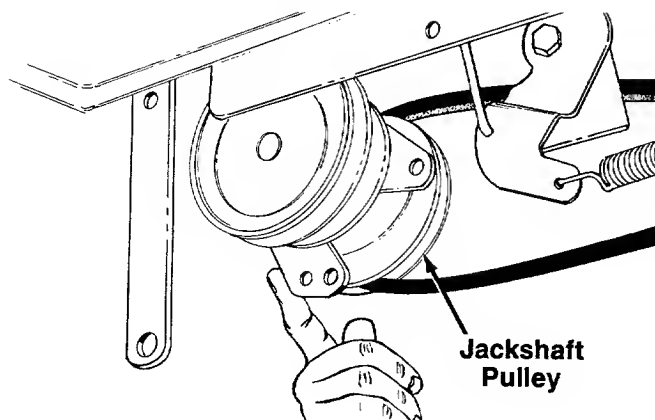


FIGURE 19.

5. Reassemble in reverse order using a new belt.

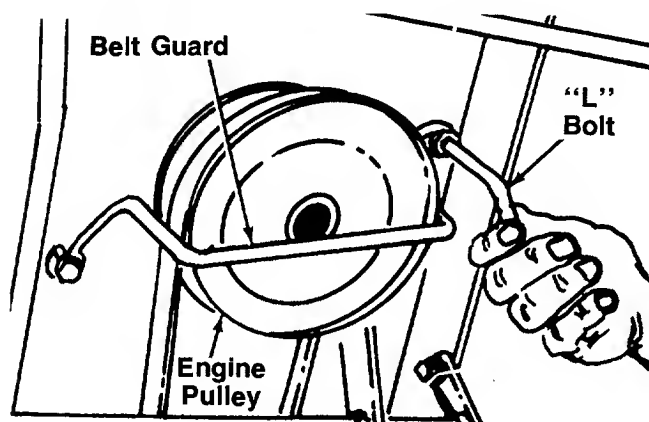
### Front Drive Belt

1. First remove the rear drive belt as instructed in preceding section.
2. Push forward on the jackshaft assembly, and slip the back of the belt at the jackshaft off the jackshaft pulley. See figure 20.



**FIGURE 20.**

3. Pull belt through the idler arm mounting bracket.
4. Release the belt guard by unscrewing the "L" bolt next to the engine pulley. See figure 21.



**FIGURE 21.**

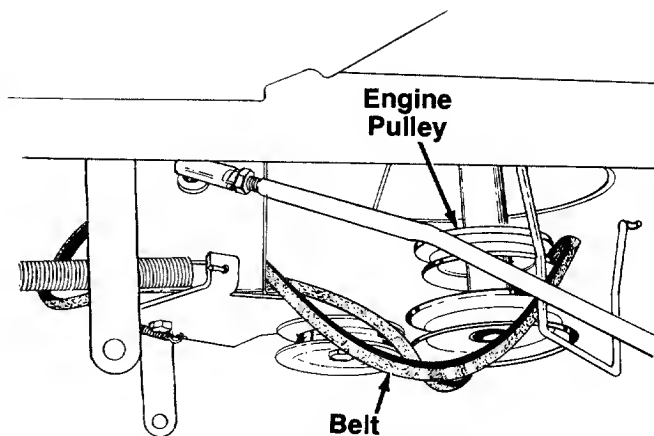
5. Swing the belt guard forward towards the front of the tractor.



**WARNING**

Observe the way the belt is twisted. If the new belt is installed backwards, the tractor will run backwards.

6. Slip belt off the engine pulley. See figure 22.
7. Install the new belt by hooking it over the engine pulley and twisting the belt to the left as you attach it to the jackshaft pulley.
8. Test the operation of the tractor to make certain the belt has been installed correctly.



**FIGURE 22.**

## OFF-SEASON STORAGE

If the machine is to be inoperative for a period longer than 30 days, prepare for storage as follows.

1. Clean the engine and the entire unit thoroughly.
2. Lubricate all lubrication points. Wipe the entire machine with an oiled rag to protect the surfaces.
3. Refer to the engine manual for correct engine storage instructions. The engine must be completely drained of fuel to prevent gum deposits from forming on essential carburetor parts, fuel lines and fuel tanks.
4. Refer to battery storage instructions on page 17.
5. Store unit in a clean, dry area.

### NOTE

When storing any type of power equipment in an unventilated or metal storage shed, care should be taken to rustproof the equipment. Using a light oil or silicone, coat the equipment, especially any chains, springs, bearings and cables.

# TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
Engine will not crank	Battery installed incorrectly	The battery must be installed with the negative terminal, identified at the terminal post by (Neg, N or -), grounded. The positive terminal (Pos, P or +) attaches to the large cable from the solenoid. The small red wire from the fuse holder or circuit breaker is also attached to the positive terminal.
	Blown fuse or circuit breaker	Replace fuse with 7½ amp. fuse ¼ x 1¼" lg. Circuit breaker will reset itself when it cools off. Fuses or circuit breakers seldom open or fail without a reason. The problem must be corrected. Check for loose connections in the fuse holder. Replace fuse holder if necessary. A dead short may be in the cranking or charging circuit where the insulation may have rubbed through and exposed the bare wire. Replace the wire or repair with electrician's tape if the wire strands have not been damaged. Note: Look for a wire pinched between body panels, burned by the exhaust pipe or muffler or rubbed against a moving part.
	Battery is dead or weak	<p>Use a hydrometer to check the condition of the battery. The Specific Gravity (s.g.) should be 1.265 at 80°F. (1.215 s.g. minimum needed for cranking engine). The reason for the battery failing must be determined. (1) Defective battery. Battery will not accept or hold a full charge. (2) Short circuit. Check for grounded wire. (3) Charging system not working.</p> <p>The charging system is an alternator located under the flywheel. It is unregulated and rated 3 amp. at 3600 r.p.m. A diode (rectifier) is located in the output lead just before the wire harness plug on the engine side.</p> <div style="text-align: center;"> <p>The diagram shows a cross-section of a wire harness plug. On the left, a red wire is labeled 'Red Wire' and a black wire is labeled 'Black Wire'. An arrow points from the black wire to the left, labeled 'To Alternator'. In the center, a component is labeled 'Diode'. To the right of the diode is a 'Shrink Tube'. On the far right, two wires enter the plug: one labeled '3 AMP DC (Batt.)' and another labeled '7 AMP AC (Lamps)'. The plug itself is labeled 'Polarized Plug'.</p> </div> <p>The diode changes A.C. to D.C. to charge the battery. A bad diode can either fail to charge the battery or discharge the battery if the alternator is shorted as well as the diode. To test: (1) Disconnect charger lead from the battery (small red wire). (2) Connect 12 V small test lamp between the 3 amp. D.C. charge lead and the positive terminal of the battery. (3) With the engine off, the lamp should not light. If it does, the diode and possibly the alternator should be replaced. (4) Start the engine. The lamp should light. If it does not, the alternator (stator) or lead wire is bad and should be replaced.</p>
	Mechanical failure (Wires and switches)	The interlock system includes two mechanical activated switches which are wired in series in the circuit used to energize the starter solenoid. While testing the interlock system, you will make the mower temporarily unsafe by permitting the engine to be started with the blade and clutch engaged. <b>WARNING:</b> While testing, disengage the clutch, shut off the blade control, set the parking brake and place the gear shift lever in neutral. Attach a wire (minimum 18 gauge) to the positive terminal of the battery and touch the other end to the small terminal on the solenoid. <b>If the engine does not crank:</b> (1) There is a loose connection or poor ground. (2) The solenoid may be bad. The solenoid can be checked by using a heavy wire (#8 gauge minimum) and jumping between the two large terminals. If the engine cranks, the solenoid is bad. (3) If the engine does not crank when you jump the solenoid, have the starter motor tested by an authorized engine dealer. If the engine does crank, the problem is with one of the safety switches, ignition switch or the wire between the fuse holder (or circuit breaker) and the small terminal on the solenoid. Note: Look for a poor connection at the switches or a defective switch. Replace if necessary.
Engine cranks but will not start	Throttle or choke not in starting position	Check owner's guide for correct position for throttle control and choke for starting.
	No spark to spark plug	<p>Spark plug lead disconnected. Connect lead. Hold spark plug lead away from engine block about 1/8". Crank engine. There should be a spark. If not, have engine repaired at authorized engine service dealer.</p> <p>Faulty spark plug. To test, remove spark plug. Attach spark plug lead to spark plug. Ground the spark plug body against the engine block. Crank the engine. The spark plug should fire at the electrode. Replace if it does not.</p>

# Models 842 thru 867

## PARTS LIST FOR MODELS 842 THRU 867 GARDEN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	720-0165		Gear Shift Knob		33	13822		Idler Mtg. Brkt.	
2	16154		Speed Selector Cam		34	741-0295		Flanged Nyliner Brg. .376 I.D. x .437	
3	711-0778		Hex Stud .250" Dia. x .62"		35	16174		Mounting Brkt. Ass'y.	
4	736-0329		L-Wash. 1/4" I.D.*		36	756-0324		Jack Shaft Ass'y.	
5	712-0287		Hex Nut 1/4-20 Thd.*		37	710-0198		Hex Sems Bolt 5/16-18 x .75" Lg.*	
6	736-0219		Bell-Wash. .400" I.D. x 1.13" O.D.		38	756-0328		Engine Pulley 47.5" I.D. x 5.56" O.D.	
7	712-0116		Hex Ins. L-Nut 3/8-24 Thd.		39	754-0245		"V"-Belt	
8	712-0181		Hex Top L-Nut 3/8-16 Thd.		40	754-0177		"V"-Belt	
9	710-0642		Hex Wash. Hd. S-Tap Scr. 1/4-20 x .75" Lg.		41	726-0111		Push Cap	
10	16155		Speed Selector Mtg. Brkt.		42	747-0655		Rod—3/16" Dia. x 7.12" Lg.	
11	16156		Speed Selector Transfer Brkt.		43	710-0459		Hex Bolt 3/8-24 x 1.50" Lg.*	
12	712-0267		Hex Nut 5/16-18 Thd.*		44	736-0267		Fl-Wash. .385" I.D. x .87" O.D.	
13	738-0147		Shld. Bolt .500" Dia. x .170		45	756-0293		Idler Pulley 4.0" O.D. x 5/8"—"V"	
14	736-0331		Bell-Wash. .39" I.D. x 1.13" O.D.		46	736-0169		L-Wash. 3/8" I.D.*	
15	710-0152		Hex Bolt 3/8-24 x 1.00" Lg.*		47	712-0241		Hex Nut 3/8-24 Thd.*	
16	736-0267		Fl-Wash. .385" I.D. x .87" O.D.		48	736-0105		Bell-Wash. .40" I.D. x .87" O.D.	
17	714-0507		Cotter Pin 3/32" Dia. x .75" Lg.*		49	748-0303		Spacer .38" I.D. x .62" O.D. x 1.87" Lg.	
18	738-0140		Shld. Bolt .437" Dia. x .180		50	741-0257		Flanged Nyliner Brg.	
19	732-0433		Extension Spring .50" Dia. x 2.75" Lg.		51	16616		Idler Pivot Brkt. Ass'y.	
20	738-0140		Shld. Bolt .437" Dia. x .180		52	736-0267		Fl-Wash. .38" I.D. x .87" O.D.	
21	16166		Speed Selector Link (843, 853 & 863)		53	710-0151		Hex Bolt 3/8-24 x 2.00" Lg.*	
	16167		Speed Selector Link (842, 847, 852, 857, 862 & 867)		54	732-0185		Extension Spring .56" O.D. x 7.75" Lg.	
22	712-0241		Hex Nut 3/8-24 Thd.*		55	714-0126		#9 Hi-Pro Key .316" X .75" Dia.	
23	736-0331		Bell-Wash. .39" I.D. x 1.13" O.D.		56	736-0176		Fl-Wash. .505" I.D. x 1.0" O.D.	
24	747-0504		Rod—Speed Control .312" Dia.		57	710-0642		Hex Wash. Hd. S-Tap Scr. 1/4-20 x .75" Lg.	
25	738-0347		Shld. Spacer .625" I.D.		58	756-0455		Trans. Pulley & Fan Ass'y.	
26	16163		Speed Cont. Transfer Swivel Brkt.		59	16617		Link	
27	16161		Speed Control Transfer Ass'y.		60	720-0187		Ball Knob	
28	736-0119		L-Wash. 5/16" I.D.*		61	711-0794		Push Rod	
29	712-0267		Hex Nut 5/16-18 Thd.*		62	714-0104		Intern. Cotter Pin	
30	714-0115		Cotter Pin 1/8" Dia. x 1.00" Lg.*		63	712-0291		Hex L-Nut 1/4-20 Thd.	
31	736-0187		Fl-Wash. .640" I.D. x 1.24" O.D.		64	711-0768		Belt Guard Pin	
32	710-0599		Hex Wash S-Tap Scr. 1/4-20 x .50" Lg.		65	732-0384		Ext. Spring 6.12 Lg.	
					66	711-0696		Stud 3/8-16 x 3.62	
					67	712-0181		Hex Top L-Nut 3/8-16 Thd.	
					68	—		Part of Hydrostatic Pump	

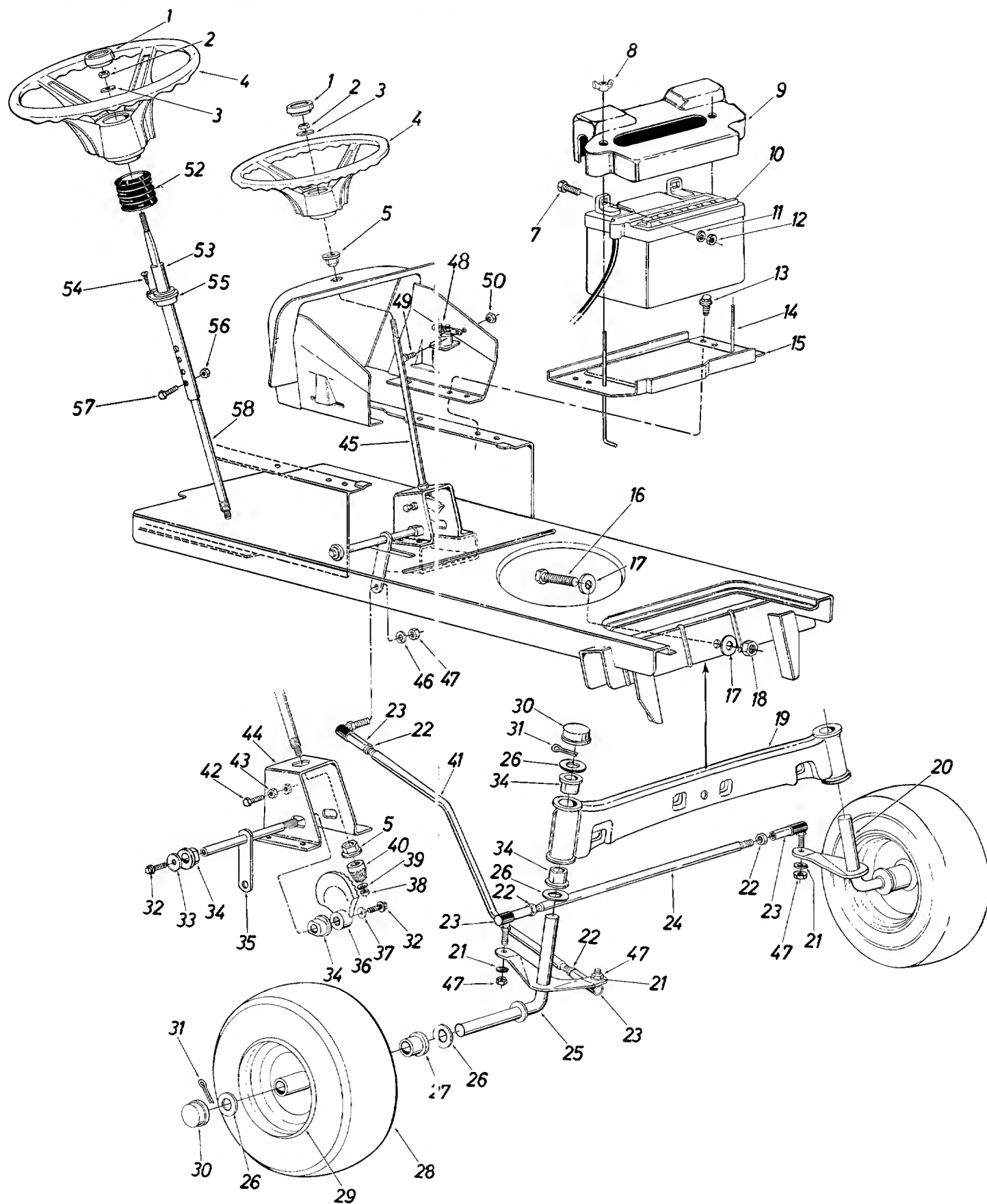
\*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

If color or finish is important when ordering parts, use the appropriate color code shown below [i.e. (part no.)-463 for Topflite Red Finish].

### Color Codes

312—White	463—Topflite Red
436—Radiant Yellow	480—Brilliant Green
447—Patina Silver	483—Charcoal Grey
452—Black	499—Beige
456—Radiant Tangerine	606—Majestic Orange
460—Green Flake	629—Silver Flake

# Models 842 thru 867



# Models 842 thru 867

## PARTS LIST FOR MODELS 842 THRU 867 GARDEN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	731-0220		Steering Wheel Cap		32	710-0180		Hex Scr. 3/8-24 x .75" Lg.	
2	712-0237		Hex Cent. L-Nut 5/16-24 Thd.					Grade 5	
3	736-0242		Bell-Wash. 5/16" I.D. x .87" O.D. x .060		33	736-0133		Fl-Wash. 3/8 I.D. x 1.25 O.D. x .090	
4	731-0806		Steering Wheel		34	741-0199		Flange Double "D" Brg. .753 I.D.	
5	741-0225		Plastic Hex Bearing 5/8" I.D.						
7	710-0258		Hex Scr. 1/4-20 x .62" Lg.		35	12749		Steering Arm Shaft Ass'y.	
8	712-0113		Wing Nut Plastic 1/4-20 Thd.		36	748-0236		Side Gear—Steering	
9	731-0707		Battery Cover		37	736-0105		Bell-Wash. 3/8" I.D.	
10	725-0453		12-V Battery		38	712-0237		Hex Cent. L-Nut 5/16-24 Thd.	
11	736-0329		L-Wash. 1/4" I.D.*		39	736-0264		Fl-Wash. 5/16" I.D. x .62 O.D. x .059	
12	712-0287		Hex Nut 1/4-20 Thd.*						
13	710-0599		Hex Thd. Rolling Scr. 1/4-20 x .50" Lg.		40	748-0237		Pinion Gear—Steering	
14	711-0222		Battery Hold Down Rod		41	747-0302		Drag Link	
15	13379		Battery Plate		42	710-0670		Hex Nylon Scr. 3/8-16 x 1.25" Lg.	
16	710-0533		Hex Scr. 5/8-18 x 2.50" Lg.*		43	712-0798		Hex Nut 3/8-16 Thd.*	
17	736-0282		Flat Wash. .66" I.D. x 2.25" O.D. x .17		44	12850		Steering Gear Sup. Ass'y.	
18	712-0923		Hex Cent. L-Nut 5/8-18 Thd.		45	738-0697		Steering Shaft†	
19	13865		Front Pivot Bar Ass'y.		46	736-0169		L-Wash. 3/8" I.D.*	
20	13839		Front Axle Ass'y.—L.H.		47	712-0241		Hex Nut 3/8-24 Thd.*	
21	736-0169		L-Wash. 3/8" I.D.*		48	725-0771		Solenoid	
22	712-0711		Hex Jam Nut 3/8-24 Thd.		49	710-0289		Hex Bolt 1/4-20 x .50" Lg.*	
23	723-0156		Ball Joint Ass'y.		50	712-0271		Hex Sems Nut 1/4-20 Thd.	
24	747-0301		Tie Rod		52	731-0559		Steering Bellow††	
25	13838		Front Axle Ass'y.—R.H.		53	16512		Upper Steering Shaft††	
26	736-0316		Fl-Wash. .780 I.D. x 1.59 O.D.		54	710-0837		Oval Hd. Cr.-Sunk Scr. #10 x 5/8" Lg.††	
27	**		Flange Bearing		55	741-0356		Fl-Bearing .89" I.D. x 1.36" O.D.††	
28	**		Front Wheel Ass'y. Comp.						
29	**		Front Wheel Rim Only		56	712-0324		Hex L-Nut 1/4-20 Thd.††	
30	731-0484		Dust Cover		57	710-0959		Hex Bolt 1/4-20 x 1.31" Lg.††	
31	714-0121		Cotter Pin 5/32" Dia. x 1.00" Lg.*		58	738-0588		Lower Steering Shaft††	

\*For faster service obtain standard nuts, bolts and washers locally. If these items cannot be obtained locally, order by part number and size as shown on parts list.

†Models 842, 847, 852, 857, 862 and 867 Only.  
††Models 843, 853 and 863 Only.

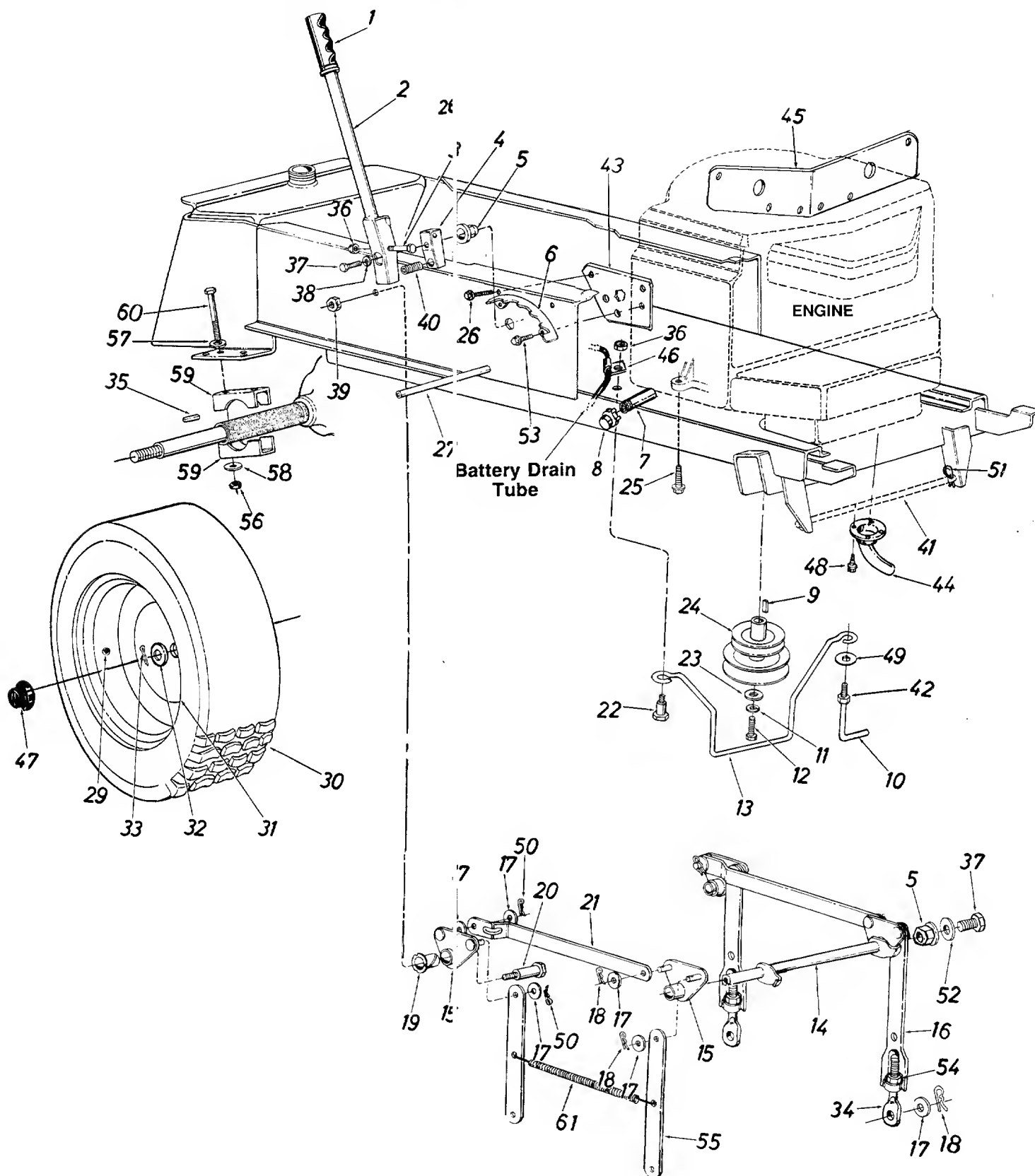
NOTE: The engine is not under warranty by the mower manufacturer...If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."



### \*\*FRONT WHEEL CHART

Description	16 x 6.50—Part No. Rib Tread	16 x 6.50—Part No. Turf Tread
Wheel Assembly Comp.	734-1006	734-1223
Tire Only	734-0526	734-0275
Rim Only	734-0787	734-0787
Bearing	741-0312	741-0312
Air Valve	734-0255	734-0255
Grease Fitting	737-0146	737-0146

# Models 842 thru 867





# Models 842 thru 867

## PARTS LIST FOR MODELS 842 THRU 867 GARDEN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	720-0157		Grip		32	736-0345		Flat Washer	
2	14233		Lift Handle Ass'y.		33	714-0142		Cotter Pin 3/16" Dia. x 1.50" Lg.	
3	710-0442		Hex Scr. 5/16-18 x 1.50" Lg.*		34	711-0773		Eye Bolt Adj. Link 1/2-13 Thd.	
4	748-0274		Lift Shaft Drive		35	714-0120		Sq. Key 1/4 x 3.0"	
5	741-0225		Plastic Hex Brg. 5/8" I.D.		36	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
6	14231		Index Brkt. Deck Lift		37	710-0237		Hex Scr. 5/16-24 x .62" Lg.*	
7	737-0164		Pipe Nipple 3/8-18 Npt.		38	736-0119		L-Wash. 5/16" Scr.*	
8	737-0143		Pipe Cap 3/8-18 Npt.		39	712-0181		Hex Top L-Nut 3/8-16 Thd.	
9	714-0118		Sq. Key 1/4" x 1/4" x 1.50" Lg.		40	732-0369		Compression Spring	
10	747-0216		Belt Guard Lock Pin		41	738-0392		Deck Connecting Rod	
11	736-0171		L-Wash. 7/16" Scr.*		42	712-0123		Hex Nut 5/16-24 Thd.*	
12	710-0757		Hex Scr. 7/16-20 x 1.50" Lg.		43	14170		Index Brkt. Reinforcement Plate	
13	747-0299		Belt Guard		44	751-0275		Exhaust Pipe	
14	13889		Lift Shaft Ass'y.		45	14282		Heat Shield (842, 844 & 846)	
15	13895		Lift Pivot Brkt. Ass'y.			15826		Heat Shield (843, 845 & 847)	
16	16092		Adj. Deck Lift Link		46	726-0175		Mounting Clamp	
17	736-0192		Fl-Wash. 1/2" I.D. x 1.00" O.D. x .090		47	731-0556		Hub Cap	
18	714-0101		Hairpin Cotter		48	710-0224		Hex Wash. Hd. AB-Tap Scr. #10 x .50" Lg.	
19	741-0295		Nyliner 5/8" I.D. x .88" Lg.		49	736-0242		Belle-Wash. .39" I.D.	
20	738-0445		Shld. Scr. 5/8" Dia. x .96" Lg. 3/8-16		50	714-0111		Cotter Pin .09 Dia. x 1.0" Lg.	
21	13790		Connecting Link		51	714-0149		Int. Cotter Pin	
22	738-0296		Shld. Scr. .437 Dia. x .268 Lg. 5/16-18		52	736-0231		Flat Wash. .34" I.D. x 1.12" O.D. x .125	
23	736-0322		Flat Wash. .44" I.D. x 1.25" O.D. x .17		53	710-0726		Hex Wash. Hd. AB-Tap Scr. 5/16 x .62" Lg.	
24	756-0328		Two-Step Engine Pulley 4.75" & 5.56		54	712-0206		Hex Nut 1/2-13 Thd.	
25	710-0502		Hex Wash. Hd. Scr. 3/8-16 x 1.25" Lg.		55	14399		Deck Link	
26	710-0600		Hex Thd. Rolling Scr. 5/16-24 x .50" Lg.		56	712-0798		Hex Nut 3/8-16 Thd.*	
27	738-0435		Running Board Rod		57	736-0262		Fl-Wash. .385" I.D. x .87" O.D.	
29	734-0255		Air Valve		58	736-0331		Bell-Wash. .39" I.D. x 1.13" O.D.	
30	**		Rear Wheel Ass'y. Comp.		59	13892		Rear Axle Bracket	
31	**		Rear Wheel Rim Only		60	710-0316		Hex Bolt 3/8-16 x 3.5" Lg.	
					61	732-0487		Extension Spring 8.25" Lg.	

The engine is not under warranty by the mower manufacturer. If repairs or service is needed on the engine, please contact your nearest authorized engine service outlet. Check the "Yellow Pages" of your telephone book under "Engines—Gasoline."

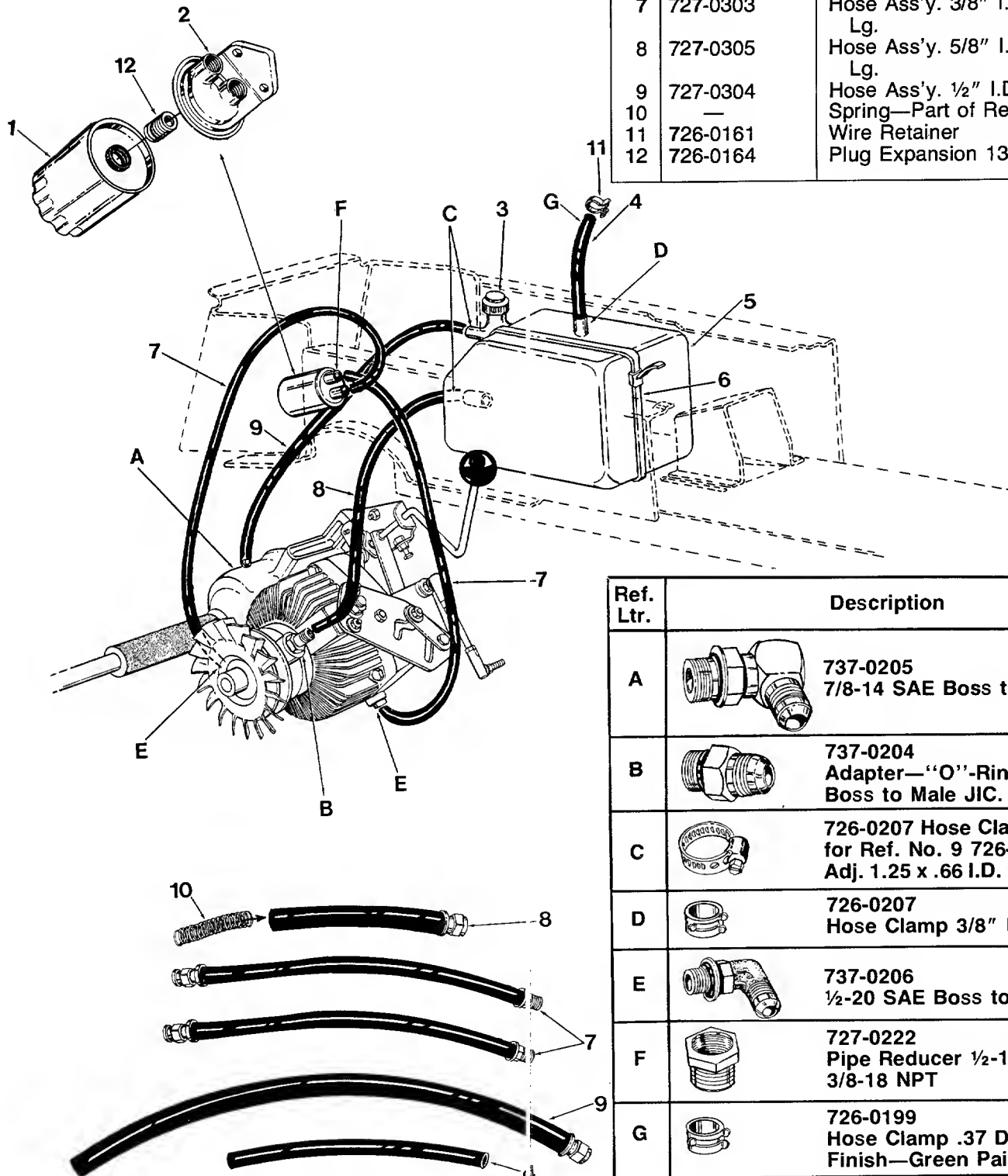
Find It Fast  
In The  
Yellow Pages

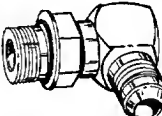
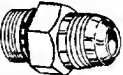





### \*\*REAR WHEEL CHART

Description	23 x 9.50—Part No.
Wheel Assembly Comp.	734-1005
Tire Only	734-0322
Rim Only	734-1015

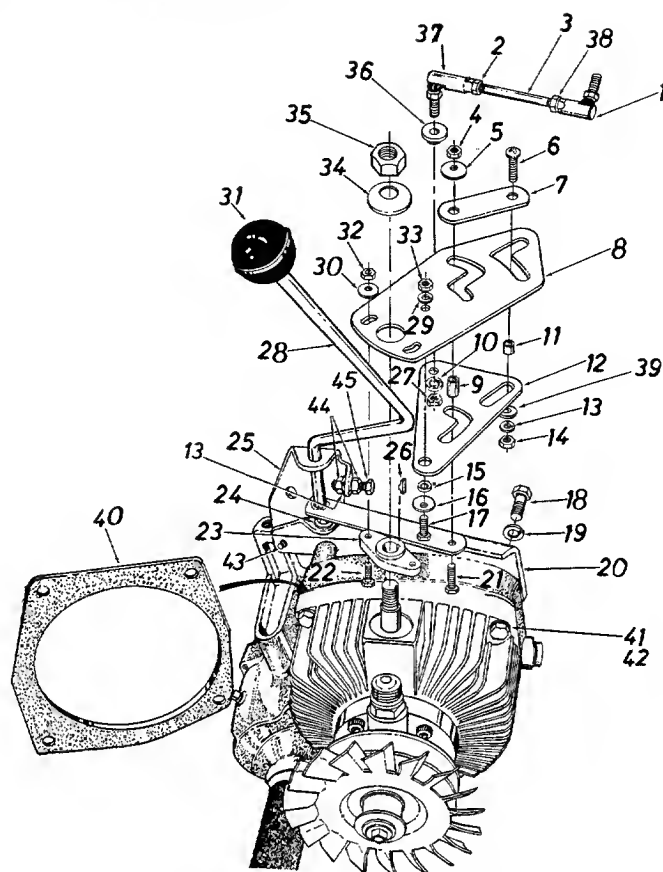
# Models 842 thru 867

REF. NO.	PART NO.	DESCRIPTION
1	727-0162	Oil Filter
2	727-0163	Filter Base
3	737-0203	Oil Reservoir Cap
4	751-0173	Gas Line—13" Lg.
5	737-0202	Oil Reservoir
6	726-0230	Cable Tie 34.25" Lg.
7	727-0303	Hose Ass'y. 3/8" I.D. x 16.5" Lg.
8	727-0305	Hose Ass'y. 5/8" I.D. x 9" Lg.
9	727-0304	Hose Ass'y. 1/2" I.D.
10	—	Spring—Part of Ref. No. 8
11	726-0161	Wire Retainer
12	726-0164	Plug Expansion 13/16



Ref. Ltr.	Description
A	 737-0205 7/8-14 SAE Boss to 3/4-16 JIC.
B	 737-0204 Adapter—"O"-Ring, Boss to Male JIC.
C	 726-0207 Hose Clamp .406 Dia. for Ref. No. 9 726-0232 Clamp Adj. 1.25 x .66 I.D. for Ref. No. 8
D	 726-0207 Hose Clamp 3/8" Dia.
E	 737-0206 1/2-20 SAE Boss to 1/2-20 JIC.
F	 727-0222 Pipe Reducer 1/2-14 to 3/8-18 NPT
G	 726-0199 Hose Clamp .37 Dia. Finish—Green Paint

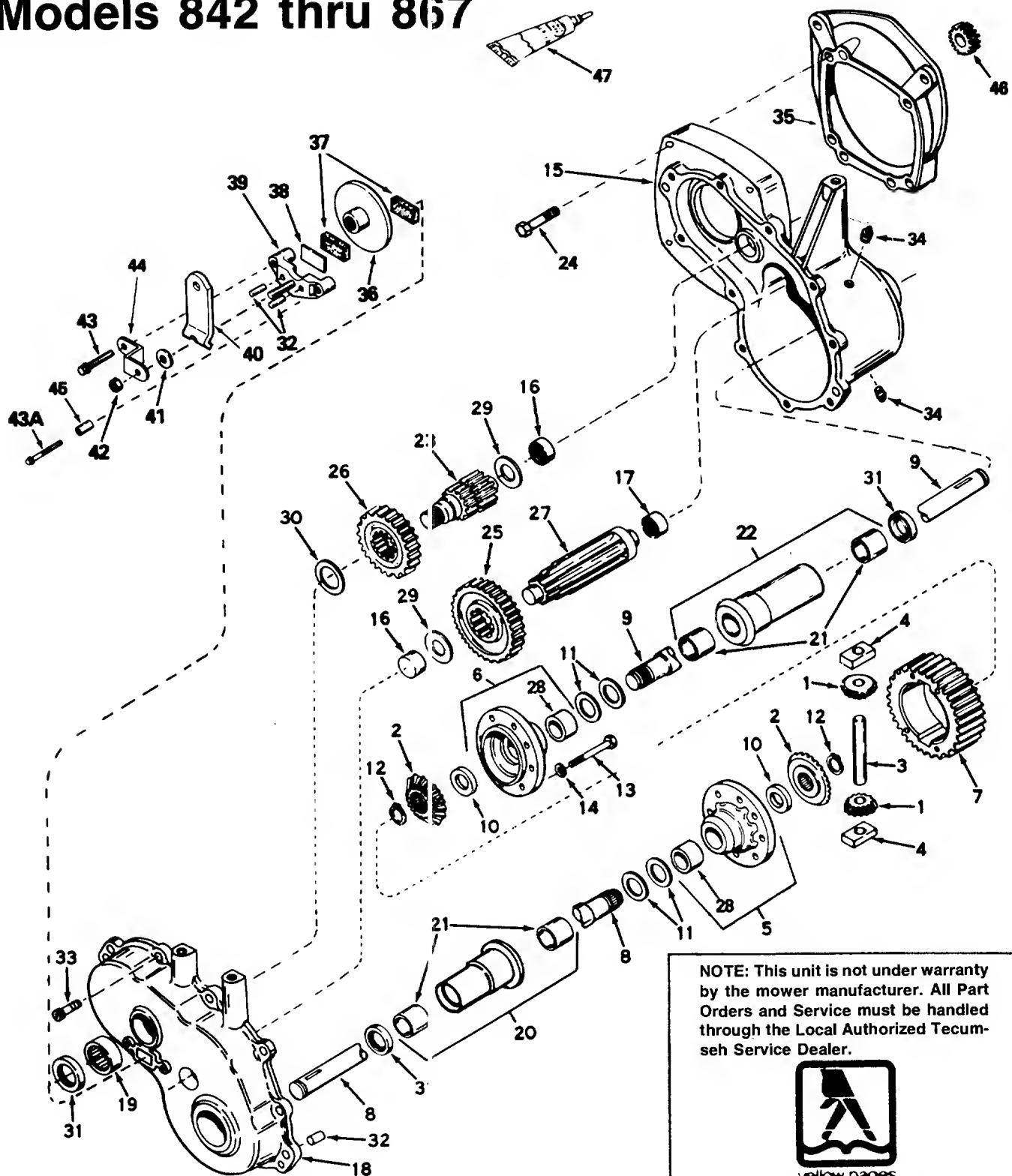
# Models 842 thru 867



**PARTS LIST FOR 842 THRU 867 GARDEN TRACTORS**

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	723-0156		Ball Joint Ass'y. 3/8-24 Thd.		25	16153		Shift Lever Bracket—Upper	
2	712-0312		Hex Nut 3/8-24 Thd. (L.H. Threads)		26	714-0131		#5 Hi-Pro Key 1/8 x 5/8 Dia.	
3	747-0508		Control Rod 3/8-24 x 3.75"		27	712-0241		Hex Nut 3/8-24 Thd.*	
4	712-0241		Hex Nut 3/8-24 Thd.*		28	16225		Shift Lever Ass'y.	
5	736-0267		FI-Wash. .385" I.D. x .87"		29	736-0169		L-Wash. 3/8" I.D.*	
6	1511-047		Truss Mach. Scr. Phil. 5/16-18 x 1.00" Lg.		30	736-0267		FI-Wash. .385" I.D. x .87"	
7	16157		Locking Link		31	720-0175		Gear Shift Knob	
8	16159		Pintle Main Control Plate		32	712-0138		Hex Nut 1/4-28 Thd.	
9	750-0630		Spacer .83" Lg.		33	712-0241		Hex Nut 3/8-24 Thd.*	
10	736-0169		L-Wash. 3/8" I.D.*		34	736-0253		Bell-Wash. .505" I.D. x 1.00"	
11	748-0304		Spacer .35" Lg.		35	712-0206		Hex Nut 1/2-13 Thd.*	
12	16160		Pintle Drive Plate		36	738-0347		Shld. Spacer .625" I.D.	
13	736-0119		L-Wash. 5/16" I.D.*		37	723-0351		Ball Joint Ass'y. 3/8-24 L.H. Thd.	
14	712-0267		Hex Nut 5/16-18 Thd.*		38	712-0711		Hex Jam Nut 3/8-24 Thd.	
15	750-0535		Spacer .38" I.D. x .227" Lg.		39	736-0343		FI-Wash. .330" I.D. x 1.25"	
16	736-0267		FI-Wash. .385" I.D. x .87"		40	721-0116		Gasket	
17	710-0152		Hex Bolt 3/8-24 x 1.00" Lg.*		41	710-0933		Hex Bolt 3/8-16 x 2.75" Lg. (Gr. 5) (3-Req'd.)	
18	710-0514		Hex Bolt 3/8-16 x 1.0" Lg. (Grade 5)			710-0944		Hex Bolt 3/8-16 x 4.25" Lg. (Gr. 5) (1-Req'd.)	
19	736-0169		L-Wash. 3/8" I.D.*		42	736-0140		FI-Wash. .385" I.D. x .62"	
20	16151		Shift Lever Bracket		43	710-0599		Hex Wash. Hd. Self-Tap Scr. 1/4-20 x .50" Lg.	
21	710-0191		Hex Bolt 3/8-24 x 1.25" Lg.*		44	712-0123		Hex Nut 5/16-24 Thd.*	
22	710-0412		Hex Bolt 1/4-28 x .75" Lg.*		45	710-0117		Hex Bolt 5/16-24 x 1.0" Lg.*	
23	748-0302		Pintle Hub						
24	741-0407		Nyliner .375" Dia. x .140						

# Models 842 thru 867



NOTE: This unit is not under warranty by the mower manufacturer. All Part Orders and Service must be handled through the Local Authorized Tecumseh Service Dealer.



yellow pages

## PEERLESS MODEL 1310-002

This unit is under warranty by Tecumseh Products Company. Parts and Service are available through all Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."

TRANSAXLE MODEL 1310-002

# Models 842 thru 867

## PARTS LIST FOR TRANSAXLE MODEL 1310-002

REF. NO.	PART NO.	DESCRIPTION	NEW PART	REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	PE-778094	Pinion, Bevel		24	PE-792120	Screw, Hex Hd., 3/8-16 x 2	
2	PE-778095	Gear, Bevel		25	PE-778036	Gear, Output	
3	PE-786019	Pin, Drive		26	PE-778195	Gear, Idler	
4	PE-786027	Block, Drive		27	PE-776244	Shaft, Output	
5	PE-774609	Carrier Ass'y., Differential (Incl. No. 28)		28	PE-780144	Bushing	
6	PE-774610	Carrier Ass'y., Differential (Incl. No. 28)		29	PE-780001	Washer	
7	PE-778033A	Gear, Ring		30	PE-780090	Washer	
8	PE-774611	Axle (13-1/16" Long)		31	PE-788008	Seal, Oil	
9	PE-774612	Axle (19-1/8" Long)		32	PE-786026	Pin, Dowel	
10	PE-780107	Washer		33	PE-792046	Screw, Hex Washer Hd. Thread Forming, 1/4-20 x 1	
11	PE-780042	Washer, Thrust		34	PE-792010	Plug, Pipe	
12	PE-792018	Ring, Snap		35	PE-786112	Plate, Adapter	
13	PE-792005	Screw, Hex Hd., 1/4-20 x 2 1/4		36	PE-790027	Disc, Brake	
14	PE-792006	Lock Washer, 1/4"		37	PE-790006	Pad, Brake	
15	PE-770081	Case Ass'y. (Incl. Nos. 16 & 17)		38	PE-790007	Plate, Brake Pad	
16	PE-780013	Bearing, Needle		39	PE-790025	Holder, Brake Pad	
17	PE-780088	Bearing, Needle		40	PE-790010	Lever, Brake	
18	PE-772085	Cover Ass'y. (Incl. Nos. 16 & 19)		41	PE-792076	Washer, Flat	
19	PE-780089	Bearing, Needle		42	PE-792075	Lock Nut, 5/16-24	
20	PE-782041A	Housing & Bushing Ass'y. (6-5/8" Long) (Incl. 2 of No. 21)		43	PE-792073	Screw, Flanged Hex Hd. Thread Forming, 1/4-20 x 1 1/4	
21	PE-780054	Bushing		44	PE-786086	Screw, Flanged Hex Hd. Thread Forming, 1/4-20 x 2 1/4	
22	PE-782067	Housing & Bushing Ass'y. (12-45/64" Long) (Incl. 2 of No. 21)		45	PE-786066	Bracket	
23	PE-776245	Shaft, Brake		46	PE-778196	Spacer	
				47	PE-510334	Gear, Spur (18 Teeth)	
						Gasket Eliminator	

NOTE: This unit is not under warranty by the mower manufacturer. All Part Orders and Service must be handled through the Local Authorized Tecumseh Service Dealer.



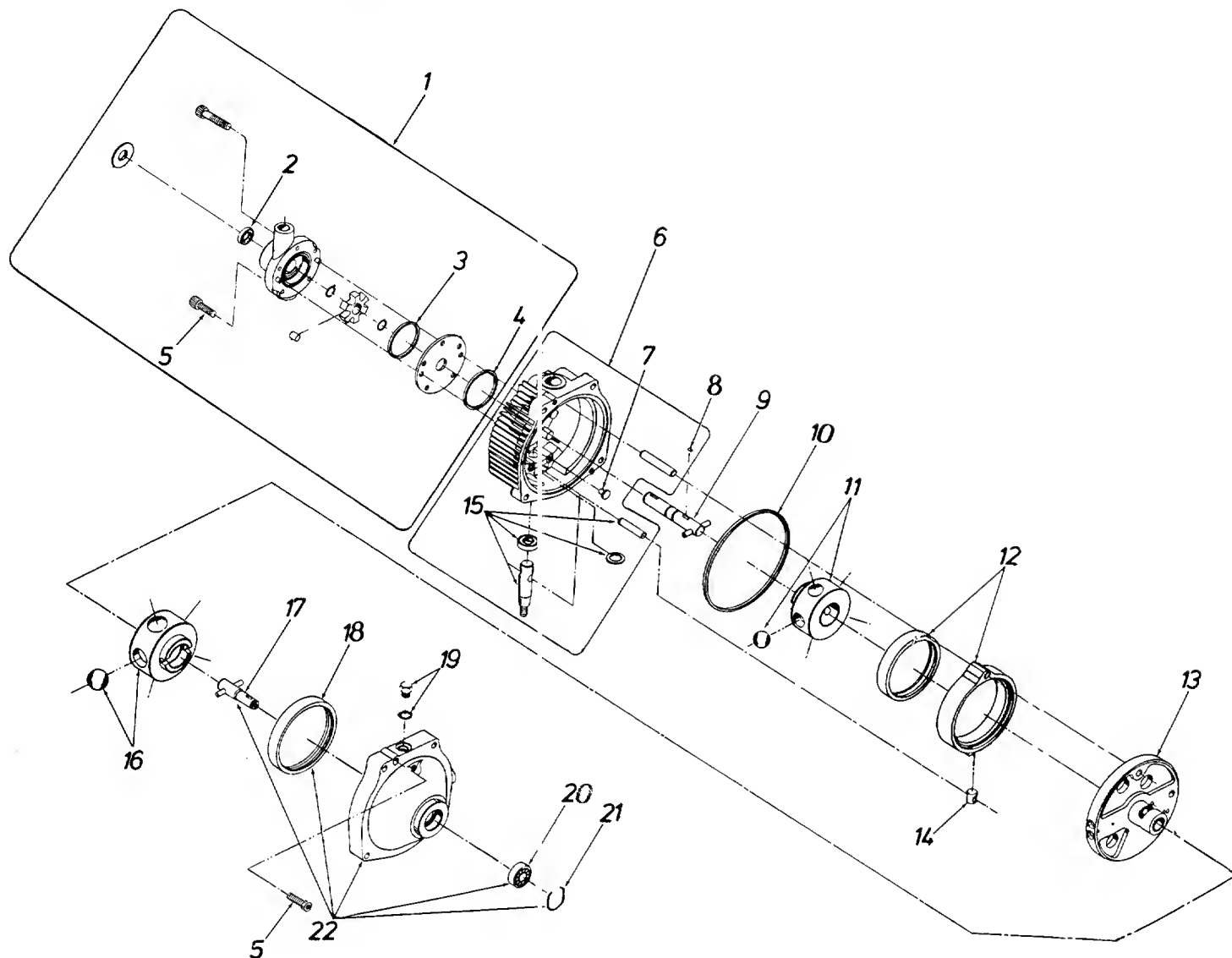
yellow pages

### PEERLESS MODEL 1310-002

This unit is under warranty by Tecumseh Products Company. Parts and Service are available through all Tecumseh, Lauson Power Products Service Dealers. Check the "Yellow Pages" of your telephone directory under "Engines—Gasoline."

# Models 842 thru 867

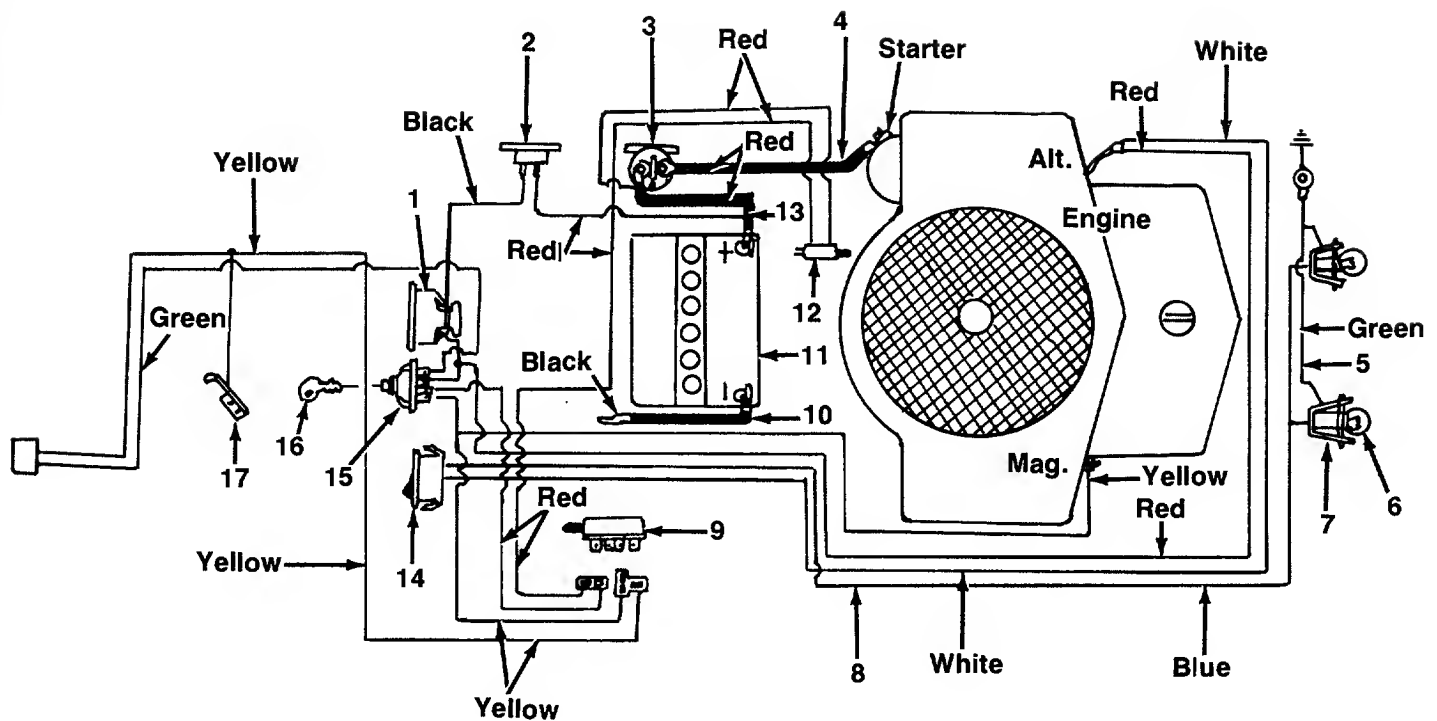
## M11 HYDROSTATIC TRANSMISSION



**PARTS LIST FOR M11 HYDROSTATIC  
TRANSMISSION ET001100-027 (717-0821)**

REF. NO.	PART NO.	DESCRIPTION	NEW PART	REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	ET-990147-000	Charge Pump Kit		12	ET-102603-000	Cam Ring Subassembly	
2	ET-093955-000	Oil Seal		13	ET-101975-000	Pintle Subassembly	
3	ET-008771-036	Square Cut Seal Ring .036		14	ET-097841-000	Cam Ring Insert	
4	ET-008771-038	Square Cut Seal Ring .038		15	ET-990136-000	Control Shaft Kit	
5	ET-095912-125	Socket Head Cap Screw 5/16-18 x 1.25" Long		16	ET-101853-000	Motor Rotor—Ball Sub- assembly	
6	ET-990114-000	Cover Subassembly		17	ET-024608-000	Output Shaft Subassembly	
7	ET-101597-000	Button		18	ET-040525-000	Motor Race	
8	ET-090880-000	Drive Pin		19	ET-025083-006	"O"-Ring Plug Subassembly	
9	ET-024490-000	Input Shaft Subassembly		20	ET-090797-000	Ball Bearing (Output)	
10	ET-008771-166	Square Cut Seal Ring .166		21	ET-101680-156	Retaining Ring	
11	ET-101470-000	Pump Rotor—Ball Sub- assembly		22	ET-102576-000	Body Subassembly	

# Models 842 thru 867



## PARTS LIST FOR ELECTRICAL SYSTEM

REF. NO.	PART NO.	DESCRIPTION	NEW PART
1	725-0925	Ammeter	
2	725-0459	Circuit Breaker	
3	725-0771	Solenoid	
4	725-0561	Electrical Cable	
5	725-0916	Double 14 x 5 Wire Lead	
6	725-0963	Lamp 12V	
7	725-1058	Twist Lock Lamp Socket	
8	725-1134	Wire Harness	
9	725-0465	Safety Switch—Blade	
10	725-0996	6 Ga. Elec. Wire Black—7.5" Lg.	
11	725-0453	Battery 12V	
12	725-0268	Safety Switch	
13	725-0563	Electric Wire	
14	725-0634	Headlight Switch	
15	725-0267	Ignition Switch	
16	725-0201	Ignition Key	
17	725-0759	Switch Spring	

# PARTS INFORMATION

## POWER EQUIPMENT PARTS AND SERVICE

Parts and service are available through the authorized service firms listed below. All orders should specify the model number of your unit, part numbers, description of parts and the quantity of each part required.

**NOTE:** If any parts are found to be missing or defective upon assembly of this unit, write to advise the factory so that immediate replacement can be made.

<b>ALABAMA</b>	<b>BIRMINGHAM</b>
Auto Electric & Carburetor Co. . . . .	2625 4th Ave. S. . . . .£5233
<b>ARKANSAS</b>	<b>NORTH LITTLE ROCK</b>
Sutton's Lawn Mower Shop. . . . .	5301 Roundtop Drive Box 368, Rt. 4 . . . . .72117
<b>CALIFORNIA</b>	<b>PORTERVILLE</b>
Billious . . . . .	75 North D Street . . . .£3257
<b>COLORADO</b>	<b>DENVER</b>
Spitzer Industrial Products Co. . . . .	6601 N. Washington St. . . . .£0229
<b>FLORIDA</b>	<b>JACKSONVILLE</b>
Radco Distributors . . . . .	4909 Victor St. Box 5459 . . . . .£2207
	<b>HIALEAH</b>
Small Eng. Dist. . . . .	7995 W. 26th Court . . .£3016
<b>GEORGIA</b>	<b>EAST POINT</b>
East Point Cycle & Key Inc. . . . .	2834 Church St. . . . .£0344
<b>ILLINOIS</b>	<b>LYONS</b>
Keen Edge Co. . . . .	8615 Ogden Ave. . . .£0534
<b>INDIANA</b>	<b>ELKHART</b>
Parts & Sales Inc. . . . .	2101 Industrial Pkwy. . .46516
<b>IOWA</b>	<b>DUBUQUE</b>
Power Lawn & Garden Equip. . . . .	2551 J.F. Kennedy. . .£2001
<b>LOUISIANA</b>	<b>NEW ORLEANS</b>
Suhren Engine Co. . . . .	8330 Earhart Blvd. . . .70118
<b>MARYLAND</b>	<b>TAKOMA PARK</b>
Center Supply Co. . . . .	6867 New Hampshire Ave. . . . .£0912
<b>MASSACHUSETTS</b>	<b>SPRINGFIELD</b>
Morton B. Collins Co. . . . .	300 Birnie Ave. . . .£1107
<b>MICHIGAN</b>	<b>LANSING</b>
Lorenz Service Co. . . . .	2500 S. Pennsylvania . .48910
	<b>MOUNT CLEMENS</b>
Power Equipment Dist. . . . .	340 Hubbard . . . . .48043
<b>MINNESOTA</b>	<b>HOPKINS</b>
Hance Distributing Inc. . . . .	420 Excelsior Ave. W. .£5343
<b>MISSOURI</b>	<b>EARTH CITY</b>
Oscar Wilson Engine & Parts . . . . .	4159 Shoreline Dr. . .£3045
	<b>KANSAS CITY</b>
Automotive Equip. Service . . . . .	3117 Holmes St. . . .£4109
Ross-Frazer Supply Co. . . . .	8th and Monterey. .£4503
Henzler, Inc. . . . .	2015 Lemay Ferry Rd. .£3125
<b>NEW JERSEY</b>	<b>ALLOWAY</b>
Piersons . . . . .	Canal St. . . . .£08001
<b>NEW MEXICO</b>	<b>ALBUQUERQUE</b>
Spitzer Eng. & Parts Co. . . . .	1023 Third Ave. N.W. .£7103

## BRIGGS AND STRATTON, TECUMSEH AND PEERLESS PARTS AND SERVICE

Briggs & Stratton, Tecumseh and Peerless parts and service should be handled by your nearest authorized engine service firm. Check the yellow pages of your telephone directory under the listing **Engines—Gasoline**, Briggs & Stratton or Tecumseh Lauson.

<b>NEW YORK</b>	<b>CARTHAGE</b>
Gamble Dist., Inc. . . . .	West End Ave. . . . .13619
<b>NORTH CAROLINA</b>	<b>GREENSBORO</b>
Dixie Sales Company . . . . .	335 N. Green . . . . .27402
<b>OHIO</b>	<b>CARROLL</b>
Stebe's Mid-State Mower Supply . . . . .	Box 366, 71 High St. . .43112
	<b>CLEVELAND</b>
Bleckrie, Inc. . . . .	7900 Lorain Ave. . . . .44102
National Central . . . . .	<b>WADSWORTH</b>
Burton Supply Co. . . . .	687 Seville Rd. . . . .44281
	<b>YOUNGSTOWN</b>
	Box 929 . . . . .44501
<b>OREGON</b>	<b>PORTLAND</b>
Kenton Supply Co. . . . .	8216 N. Denver Ave. . .97217
<b>PENNSYLVANIA</b>	<b>HARRISBURG</b>
EECO Inc. . . . .	4021 N. 6th St. . . . .17110
	<b>WILLOW GROVE</b>
Thompson Rubber Co. . . . .	850 Davisville Rd. . . .19090
	<b>PITTSBURGH</b>
Bluemont Co. . . . .	11125 Frankstown Rd. .15235
Frank Roberts & Sons . . . . .	<b>PUNXSUTAWNEY</b>
	R.D. 2 . . . . .15767
Scranton Auto Ignition Co. . . . .	<b>SCRANTON</b>
	1133-35 Wyoming Ave. .18509
<b>TENNESSEE</b>	<b>KNOXVILLE</b>
Ace Distributors . . . . .	2103 Magnolia . . . . .37919
	<b>MEMPHIS</b>
American Sales & Service, Inc. . . . .	3035-43 Bellbrook . . .38116
<b>TEXAS</b>	<b>DALLAS</b>
Marr Brothers, Inc. . . . .	423 E. Jefferson. . . .75203
	<b>FORT WORTH</b>
Woodson Sales Corp. . . . .	6733 Baker Blvd. Hwy. 10 . . . . .76118
	<b>SAN ANTONIO</b>
Engine House Inc. . . . .	8610 Botts Lane P.O. Box 17867 . . . .78217
<b>UTAH</b>	<b>SALT LAKE CITY</b>
Powered Products . . . . .	1661 N. Beck St. . . . .84116
<b>VIRGINIA</b>	<b>ASHLAND</b>
RBI Corp. . . . .	101 Cedar Ridge Dr. . .23005
<b>WASHINGTON</b>	<b>SEATTLE</b>
Equip. Northwest . . . . .	1410 14th Ave. . . . .98122
<b>WISCONSIN</b>	<b>MILWAUKEE</b>
Wisconsin Magneto Inc. . . . .	4727 N. Teutonia St. . .53209

## WARRANTY PARTS AND SERVICE POLICY

(0686)

The purpose of warranty is to protect the customer from defects in workmanship and materials, defects which are NOT detected at the time of manufacture. It does not provide for the unlimited and unrestricted replacement of parts. Use and maintenance are the responsibility of the customer. The manufacturer cannot assume responsibility for conditions over which it has not control. Simply put, if it's the manufacturer's fault, it's the manufacturer's responsibility; if it's the customer's fault, it's the customer's responsibility.

### CLAIMS AGAINST THE MANUFACTURER'S WARRANTY INCLUDES:

1. Replacement of Missing Parts on new equipment.
2. Replacement of Defective Parts within the warranty period.
3. Repair of Defects within the warranty period.

All claims MUST be substantiated with the following information:

1. Model Number, Serial Number and/or Data Code of unit involved.
2. Date unit was purchased or first put into service.
3. Date of Failure.
4. Nature of Failure.



## TROUBLE SHOOTING CHART FOR ELECTRIC START MODELS

TROUBLE	LOOK FOR	REMEDY
	No fuel to the carburetor	Gasoline tank empty. Fill. Fuel line or in-line fuel filter plugged. Remove and clean fuel line. Replace filter if necessary.
	Air filter dirty	If the air cleaner is dirty, the engine may not start. Clean or replace as recommended by the engine manufacturer.
Engine smokes	Engine loses crankcase vacuum	Dipstick not seated or broken. Replace defective part. Engine breather defective. Replace.
Excessive vibration	Bent or damaged blade spindle	<b>Stop engine immediately.</b> Check all pulleys, blade adapters, keys and bolts for tightness and damage. Tighten or replace any damaged parts.
	Bent blade	<b>Stop engine immediately.</b> Replace damaged blade. Only use original equipment blades.
Mower will not discharge grass or leaves uncut strips	Engine speed low Transmission selection Blades short or dull	Throttle must be set between 3/4 and full throttle. Use lower transmission speed. The slower your ground speed, the better the quality of cut. Sharpen or replace blades (uncut strip problem only).

## OPTIONAL EQUIPMENT

At the time of manufacture of garden tractor, the following optional equipment is available.

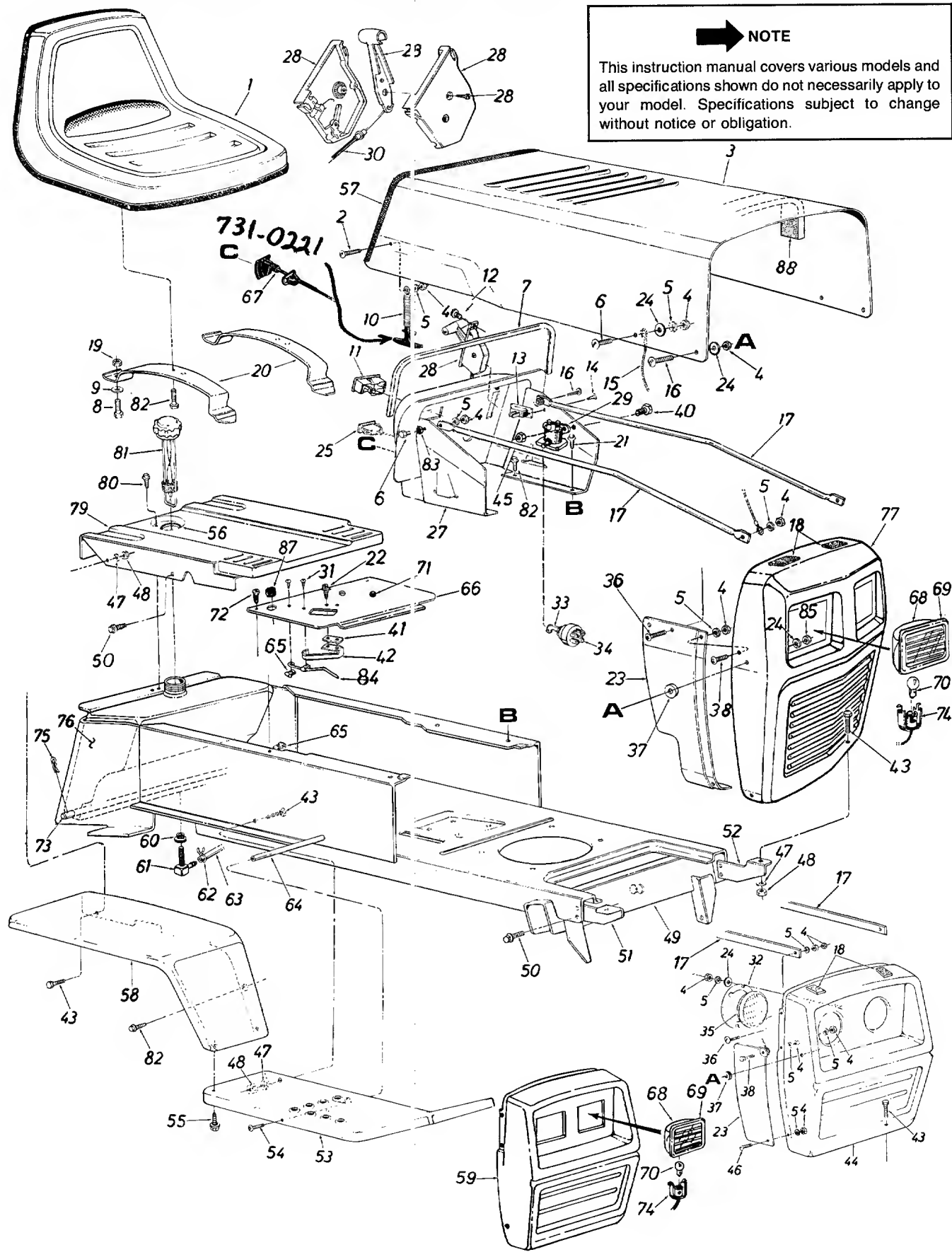
Description	Model No.	Description	Model No.
38" Side Discharge Deck	190-765-000	Electric Lift Kit	190-749-000
44" Rear Discharge Deck	190-931-000	Sleeve Hitch	190-929-000
44" Side Discharge Deck	190-935-000	28" Tiller Attachment	190-746-000
40" Snow Thrower	190-930-000	40" 8 HP Tiller Attachment	190-766-000
48" Dozer Blade	190-940-000	10" Plow	190-978-000
Gang Reel (Set of three)	190-466-000	Single Disc Harrow	190-980-000
38" Lawn Sweeper	190-483-000	Row Cultivator	190-984-000
Lawn Roller	190-660-000	Front Counterweight	190-925-000
Dump Cart	190-653-000	50 Lb. Wheel Weights (pair)	190-784-000
Spike Aerator	190-655-000	Ag Tires—23 x 10.5 (pair)	190-859-000
Core Aerator	190-901-000	Tire Chains—23 x 9.5	190-964-000

# Models 842, 847, 852, 857, 862 and 867



## NOTE

This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.



# Models 842, 847, 852, 857, 862 and 867

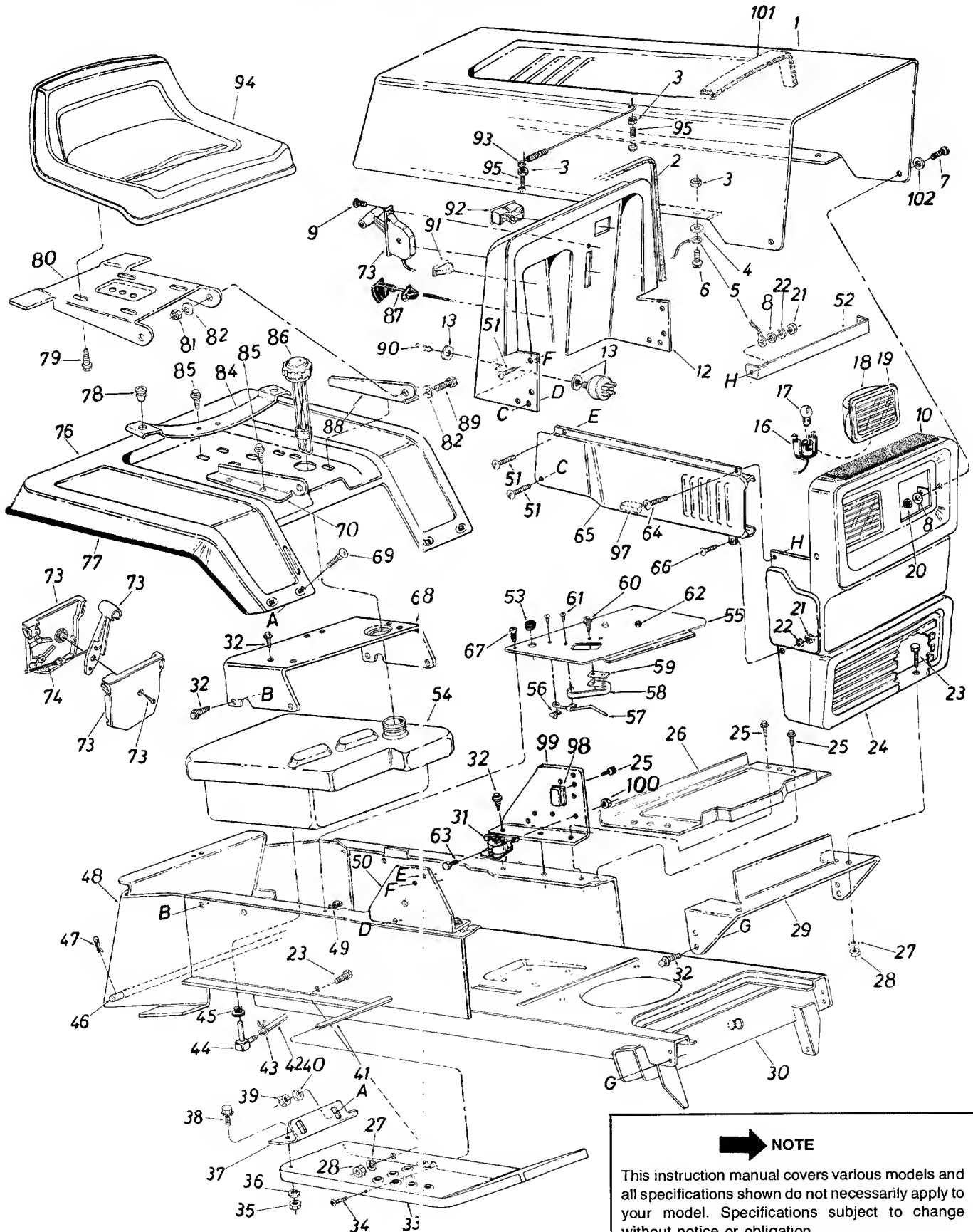
## PARTS LIST FOR GARDEN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	757-0308		Seat Assembly		43	710-0118		Hex Scr. 5/16-18 x .75" Lg.*	
2	710-0286		Truss Mach. Scr. 1/4-20 x .50" Lg.*		44	13801	463	Grille Ass'y. (Painted)	
3	13808	463	Hood			14226		Grille Ass'y. (Chrome)	
4	712-0287		Hex Nut 1/4-20 Thd.*		45	712-0271		Hex Sems Nut 1/4-20 Thd.	
5	736-0329		L-Wash. 1/4" Scr.*		46	710-0286		Truss Mach. Scr. 1/4-20 x .50" Lg.*	
6	710-0166		Truss Mach. Scr. 1/4-20 x 1" Lg.*		47	736-0119		L-Wash. 5/16" Scr.*	
7	731-0511		Vinyl Molding Strip—29"		48	712-0267		Hex Nut 5/16-18 Thd.*	
8	710-0689		Hex Nylon Scr. 1/2-13 x .75" Lg.		49	13820		Lower Frame Ass'y.	
9	736-0192		FI-Wash. .50" I.D. x 1.00" O.D. x .090		50	710-0726		Hex Thd. Rolling Scr. 5/16" x .75" Lg.	
10	723-0296		Hood Latch Ass'y.		51	17004		Grille Mount Brkt.—R.H.†	N
11	725-0925		Ammeter			13862		Grille Mount Brkt.—R.H.††	N
12	710-0779		Truss Mach. AB-Tap Scr. #10 x .50" Lg.		52	17005		Grille Mount Brkt.—L.H.†	
13	725-0459		Circuit Breaker 8 Amp.			13863		Grille Mount Brkt.—L.H.††	
14	710-0351		Hex Tap Scr. #10 x .50" Lg.*		53	13828	463	Running Board—R.H.	
15	727-0199		Hood Stop			13827	463	Running Board—L.H. (Not Shown)	
16	710-0255		Truss Mach. Scr. 1/4-20 x .75" Lg.*		54	710-0323		Truss Mach. Scr. 5/16-18 x .75" Lg.*	
17	749-0720		Grille Positioning Rod†	N	55	710-0726		Hex Thd. Rolling Scr. 5/16-24 x .75" Lg.	
	749-0651		Grille Positioning Rod††		56	735-0179		Grommet (Gas Tank Neck)	
18	722-0157		PVC Foam Strip 1/2 x 1.00" x 2.00" Lg.		57	731-0511		Vinyl Moulding Strip—30"	
19	712-0206		Hex Nut 1/2-13 Thd.*		58	13810	463	Fender Ass'y.—R.H.	
20	13123		Seat Spring			13809	463	Fender Ass'y.—L.H. (Not Shown)	
21	710-0599		Hex Thd. Rolling Scr. 1/4" x .50" Lg.		59	16486		Grille With Sq. Headlights	
22	710-0227		Hex AB-Tap Scr. #8 x .5" Lg.		60	735-0149		Bushing (Gas Tank)	
23	16622		Grille Side Panel—R.H.†	N	61	751-3054		90° Nipple	
	16621		Grille Side Panel—L.H.† (Not Shown)	N	62	726-0207		Hose Clamp 3/8"	
	14748	463	Grille Side Panel—R.H.††		63	751-0173		Gas Line 46" Lg.	
	14749	463	Grille Side Panel—L.H.†† (Not Shown)		64	738-0435		Running Board Rod	
24	736-0173		FI-Wash. 1/4" I.D.		65	712-0147		Speed Nut #10-24 U-Type	
25	725-0634		Light Switch		66	16172		Transmission Cover Ass'y.	
27	16228		Dash Panel Ass'y.		67	746-0613		Choke Control Comp.	
28	831-0823		Throttle Control Box Comp.		68	731-0705		Headlight Housing	
29	725-0771		Solenoid		69	731-0706		Headlight Lens	
30	746-0634		Throttle Control Cable		70	725-0963		Lamp	
31	710-0351		Truss Hd. Scr. #10 x .50" Lg.	N	71	731-0405		Snap Bushing	
32	09960		Head Lamp Retainer		72	710-0351		Truss Hd. Scr. #10 x .50"	
33	725-0201		Ignition Key		73	738-0482		Hitch Rod	
34	725-0267		Ignition Switch		74	725-1058		Headlight Socket	
35	725-0222		Head Lamp		75	714-0147		Internal Cotter Pin	
36	710-0255		Truss Machine Scr. 1/4-20 x .75" Lg.*		76	751-0259		Gas Tank	
37	735-0144		Rubber Wash. .50" I.D. x 1.00 O.D. x .25 Thk.		77	17026		Grille	
38	710-0286		Truss Mach. Scr. 1/4-20 x .50" Lg.*		79	13814		Seat Plate	
39	725-0764		Reverse Lockout Wire Harness		80	710-0726		Hex Thd. Rolling Scr. 5/16-24 x .75" Lg.	
40	710-0289		Hex Bolt 1/4-20 x .50" Lg.*		81	723-0346		Gas Gauge	
41	726-0222		Insulator Nut Plate		82	710-0726		Hex Thd. Rolling Scr. 5/16-24 x .75" Lg.	
42	725-0759		Switch Spring		83	736-0222		External Wash. 1/4" I.D.	
					84	732-0476		Shift Lever Spring	
					85	712-0107		Hex L-Nut 1/4-20 Thd.	
					86	13831		Seat Spring Guide	
					87	741-0475		Plastic Bushing	N
					88	722-0138		PVC Foam Strip	

†Used With Grille Assembly Ref. Nos. 44 and 59.  
††Used With Grille Assembly Ref. No. 17.

\*For faster service obtain standard nuts, bolts and washers locally.  
If these items cannot be obtained locally, order by part number and size as shown on parts list.

# Models 843, 853 and 863



## NOTE

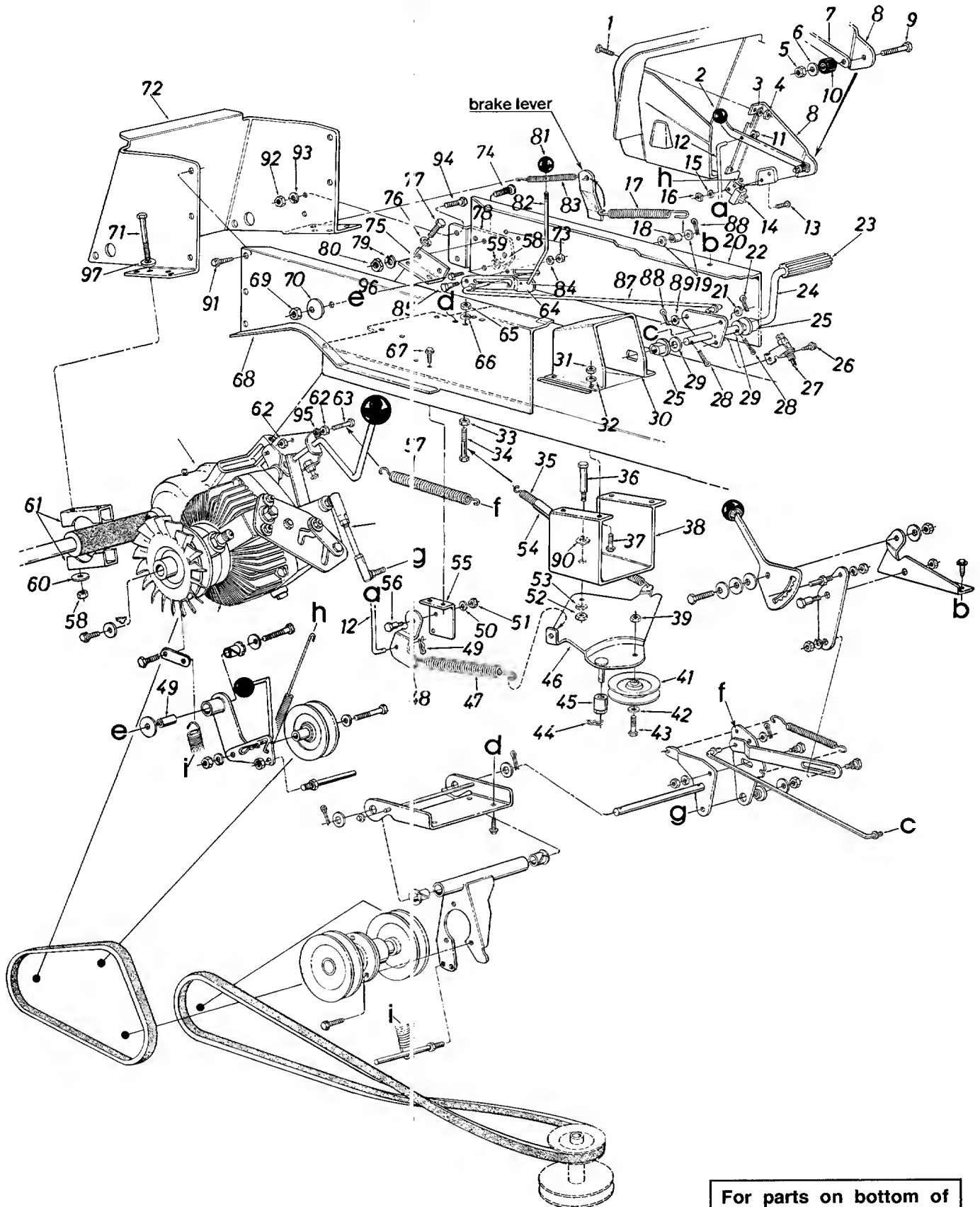
This instruction manual covers various models and all specifications shown do not necessarily apply to your model. Specifications subject to change without notice or obligation.

# Models 843, 853 and 863

## PARTS LIST FOR MODELS 843, 853 AND 863 GARDEN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	15808	463	Hood		52	15931		Tie Strap	
2	731-0511		Trim Strip—27" Lg.		53	741-0475		Plastic Bushing	
3	712-0272		Hex Sems Nut #10-24 Thd.		54	751-0367		Fuel Tank	
4	736-0931		FI-Wash. .20" I.D. x .41"		55	16173		Transmission Cover Ass'y.	
5	727-0290		Hood Stop		56	712-0147		Speed Nut #10-24 U-Type	
6	710-0473		Truss Hd. Mach. Scr. #10-24 x .50" Lg.*		57	732-0467		Shift Lever Spring	
7	738-0724		Shld. Bolt .375 Dia. x .125		58	725-0759		Switch Spring	
8	736-0463		FI-Wash. 1/4" I.D.*		59	726-0222		Insulator Plate	
9	710-0779		Truss Mach. AB-Tap Scr. #10 x .50" Lg.		60	710-0227		Hex Wash. Hd. AB-Tap Scr. #18 x .50	
10	722-0157		Foam Strip 3/8" x 1" x 14"		61	710-0351		Truss Mach. Scr. #10 x .50" Lg.	
12	16449		Dash Ass'y.		62	731-0405		Snap Bushing	
13	725-0267		Ignition Switch		63	710-0289		Hex Bolt 1/4-20 x .50" Lg.*	
16	725-1058		Socket		64	710-0255		Truss Hd. Scr. 1/4-20 x .75" Lg.*	
17	725-0963		Lamp		65	16469	463	Side Panel—R.H.	
18	731-0705		Headlight Housing			15815	463	Side Panel—L.H. (Not Shown)	
19	731-0706		Lens		66	710-0286		Truss Mach. Scr. 1/4-20 x .50" Lg.*	
20	712-0380		L-Nut 1/4-28 Thd.		67	710-0351		Truss Mach. "B" Tap Scr. #10 x .50" Lg.	
21	712-0287		Hex Nut 1/4-20 Thd.*		68	15849		Seat Mounting Channel	
22	736-0329		L-Wash. 1/4" I.D.*		69	710-0167		Carriage Bolt 1/4-20 x .50" Lg.*	
23	710-0118		Hex Bolt 5/16-18 x .75" Lg.*		70	15802		Seat Bracket—R.H.	
24	15804	463	Grille		73	831-0823		Throttle Control Box Ass'y.	
25	710-0599		Hex Wash. Hd. Scr. 1/4" x .50" Lg.		74	746-0634		Throttle Control Wire	
26	13379		Battery Plate		76	15886	463	Rear Fender	
27	736-0119		L-Wash. 5/16" I.D.*		77	731-0511		Trim Strip—81"	
28	712-0267		Hex Nut 5/16-18 Thd.*		78	731-0555		Grommet	
29	15825		Grille Mounting Bracket		79	710-0623		Hex Wash. Hd. AB-Tap Scr. 3/8 x .75" Lg.	
30	13820		Lower Frame Ass'y.		80	15607		Seat Pivot Bracket	
31	725-0771		Solenoid		81	712-0158		Hex Cent. L-Nut 5/16-18 Thd.	
32	710-0726		Hex Thd. Rolling Scr. 5/16-24 x .75" Lg.		82	736-0242		Belleville Wash. .34" I.D. x .88" O.D.	
33	13828	463	Running Board—R.H.		84	732-0431		Seat Spring	
	13827	463	Running Board—L.H. (Not Shown)		85	710-0607		Hex Wash. Hd. Self-Tap Scr. 5/16-18 x .50" Lg.	
34	710-0323		Truss Mach. Scr. 5/16-18 x .75" Lg.*		86	751-0370		Gas Cap w/Gauge	
35	712-0267		Hex Nut 5/16-18 Thd.*		87	746-0613		Choke Control Comp.	
36	736-0242		Bell-Wash. .34" I.D. x .87"		88	15803		Seat Bracket—L.H.	
37	15846		Fender Brkt.—R.H.		89	710-0118		Hex Bolt 5/16-18 x .75" Lg.*	
	15847		Fender Brkt.—L.H. (Not Shown)		90	725-0201		Ignition Key	
38	710-0118		Hex Bolt 5/16-18 x .75" Lg.*		91	725-0634		Light Switch	
39	712-0287		Hex Nut 1/4-20 Thd.*		92	725-0925		Ammeter	
40	736-0329		L-Wash. 1/4" I.D.*		93	732-0462		Hood Spring	
41	738-0435		Running Board Rod		94	757-0308		Seat Ass'y.	
42	751-0173		Fuel Line 40" Lg.		95	710-0749		Hex Screw #10-24 x 1.0" Lg.*	
43	726-0207		Hose Clamp 3/8"		97	735-0224		Rubber Strip 1/2" Sq. x 2 1/2" Lg.	
44	751-3054		90° Nipple		98	725-0459		Circuit Breaker	
45	735-0149		Bushing (Fuel Tank)		99	15829		Dash Support Brkt.—L.H.	
46	738-0482		Hitch Rod		100	712-0271		Hex Sems Nut 1/4-20 Thd.	
47	714-0147		Internal Cotterpin		101	722-0138		PVC Foam Strip	
48	13813		Hitch Plate		102	736-0413		Washer .34" I.D. x .62"	
49	726-0139		Speed Nut						
50	15828		Dash Support Brkt.—R.H.						
51	710-0642		Hex Wash. Hd. Tap Scr. 1/4 x .75" Lg.						

# Models 842 thru 867



For parts on bottom of  
this page refer to page 28.

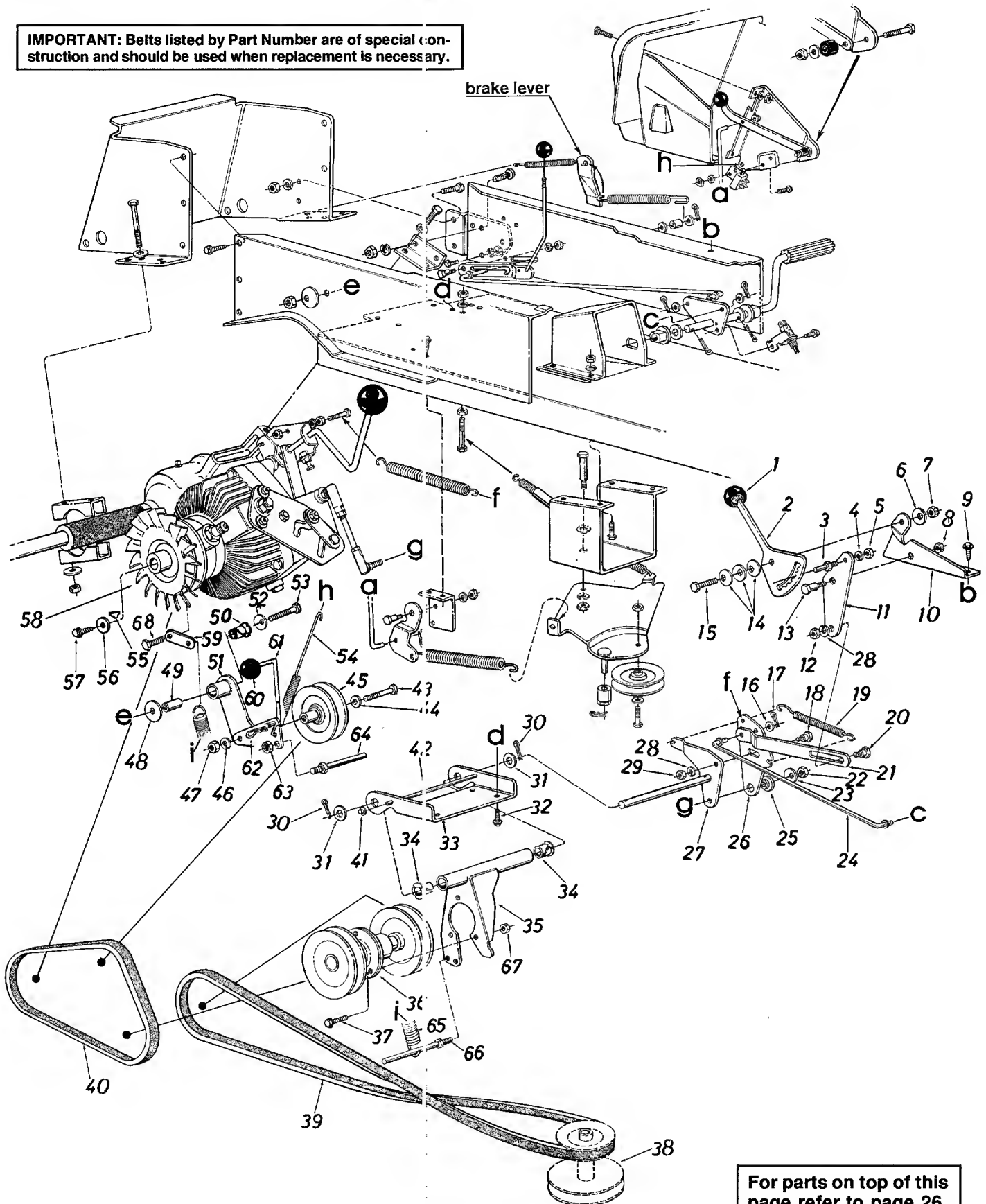
# Models 842 thru 867

## PARTS LIST FOR MODELS 842 THRU 867 GARDEN TRACTORS

REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART	REF. NO.	PART NO.	COLOR CODE	DESCRIPTION	NEW PART
1	710-0286		Truss Mach. Scr. 1/4-20 x .50" Lg.		48	13887		Deck Control Pivot Brkt.	
2	720-0165		Knob—Blade Clutch		49	714-0104		Cotter Pin 5/16" Rod	
4	712-0271		Hex Sems Nut 1/4-20 Thd.		50	736-0119		L-Wash. 5/16" I.D.*	
5	712-0107		Hex Cent. L-Nut 1/4-20 Thd.		51	712-0267		Hex Nut 5/16-18 Thd.*	
6	736-0173		FI-Wash. 1/4" I.D. x .75" O.D.		52	712-0267		Hex Nut 5/16-18 Thd.*	
7	747-0513		PTO Lever		53	736-0119		L-Wash. 5/16" I.D.*	
8	13950		Deck Clutch Control Brkt.		54	731-0483		Convuluted Conduit .50" I.D. x 4" Lg.	
9	710-0106		Hex Bolt 1/4-20 x .75" Lg.*		55	13833		Parking Brake Cam Mtg. Brkt.	
10	735-0126		Rubber Wash. .33" I.D. x .87" O.D.		56	738-0155		Shld. Bolt 7/16" Dia. x .16"	
11	726-0106		Push Cap 1/4" Rod		57	732-0384		Extension Spring	
12	747-0307		Deck Control Rod		58	712-0798		Hex Nut 3/8-16 Thd.*	
13	710-0473		Truss Mach. Scr. #10-24 x .50" Lg.*		59	736-0169		L-Wash. 3/8" I.D.*	
14	725-0465		Safety Switch (Deck)		60	736-0331		Bell-Wash. .39" I.D. x 1.13"	
15	736-0147		Ext. L-Wash. #10 Scr.		61	13892		Rear Axle Brkt.	
16	712-0121		Hex Nut #10-24 Thd.*		62	712-0123		Hex Nut 5/16-24 Thd.*	
17	732-0475		Extension Spring .75" O.D. x 5.56" Lg.		63	710-0624		Hex (Special) Scr. 5/16-24 x 1.5"	
18	750-0497		Spacer .375" I.D. x .625" O.D. x .445" Lg.		64	16170		Parking Brake Cam	
19	736-0267		FI-Wash. .385" I.D. x .87" O.D.		65	712-0287		Hex Nut 1/4-20 Thd.*	
20	16443		Side Panel Upper Frame—L.H.		66	736-0329		L-Wash. 1/4" I.D.*	
21	736-0267		FI-Wash. .385" I.D. x .87" O.D.		67	710-0599		Hex Wash. Hd. S-Tap Scr. 1/4-20 x .50" Lg.	
22	714-0507		Cotter Pin 3/32" Dia. x .75" *		68	16150		Side Panel Upper Frame—R.H.	
23	735-0196		Foot Pad		69	712-0241		Hex Nut 3/8-24 Thd.*	
24	16164		Foot Pedal Brkt. Ass'y.		70	736-0227		FI-Wash. .39" I.D. x 1.5" O.D.	
25	748-0209		Flange Brg. .630" I.D. x 1.25" O.D.		71	710-0316		Hex Bolt 3/8-16 x 3.50" Lg.*	
26	710-0599		Hex Wash. Hd. S-Tap Scr. 1/4-20 x .50" Lg.		72	13813		Hitch Plate	
27	725-0268		Safety Switch		73	712-0798		Hex Nut 3/8-16 Thd.*	
28	714-0115		Cotter Pin 1/8" Dia. x 1.00" *		74	710-0617		Rd. Hd. Ribbed Neck Bolt 3/8-24 x 1.0" Lg.	
29	736-0187		FI-Wash. .640" I.D. x .24" O.D.		75	16152		Mounting Brkt. Transaxle	
30	12850		Steering Gear Support Ass'y.		76	736-0169		L-Wash. 3/8" I.D.*	
31	712-0267		FI-Wash. .385" I.D. x .87" O.D.		77	710-0514		Hex Bolt 3/8-16 x 1.00" Lg. (Grade 5)	
32	736-0119		L-Wash. 5/16" I.D.*		78	16169		Reinforcement Plate—Frame	
33	712-0287		Hex Nut 1/4-20 Thd.*		79	736-0169		L-Wash. 3/8" I.D.*	
34	710-0510		Hex Bolt 1/4-20 x 2.0" Lg.*		80	712-0241		Hex Nut 3/8-24 Thd.*	
35	732-0308		Extension Spring .50" O.D. x 6.37" Lg.		81	720-0166		Gear Shift Knob	
36	738-0155		Shld. Bolt 7/16" Dia. x .16"		82	747-0672		Parking Brake Link	
37	710-0376		Hex Bolt 5/16-18 x 1.00" *		83	732-0409		Extension Spring .38" O.D. x 3.18" Lg.	
38	13826		Idler Mtg. Brkt.—Deck		84	712-0798		Hex Nut 3/8-16 Thd.*	
39	712-0181		Hex L-Nut 3/8-16 Thd.		85	738-0147		Shld. Bolt .500" Dia. x .170	
41	756-0293		"V"-Idler Pulley		87	747-0505		Rod—Brake .38" Dia. x 19.3" Lg.	
42	736-0300		FI-Wash. 3/8" I.D.		88	714-0507		Cotter Pin 3/32" Dia. x .75"	
43	710-0342		Hex Bolt 3/8-16 x 1.75" Lg.*		89	736-0267		FI-Wash. .385" I.D. x .87"	
44	714-0104		Cotter Pin 5/16" Rod		90	736-0141		Wave Wash.	
45	748-0278		Spacer		91	710-0726		Hex AB-Tap Scr. 5/16 x .75"	
46	13893		Idler Brkt. Ass'y.		92	712-0123		Hex Nut 5/16-24 Thd.*	
47	732-0478		Extension Spring—Deck Control		93	736-0119		L-Wash. 5/16" I.D.*	
					94	710-0157		Hex Bolt 5/16-24 x .75" Lg.*	
					95	736-0119		L-Wash. 5/16" I.D.*	
					96	710-0216		Hex Bolt 3/8-16 x .75" Lg.*	
					97	736-0262		FI-Wash. .385" I.D. x .870" O.D.	

# Models 842 thru 867

**IMPORTANT:** Belts listed by Part Number are of special construction and should be used when replacement is necessary.



For parts on top of this page refer to page 26.